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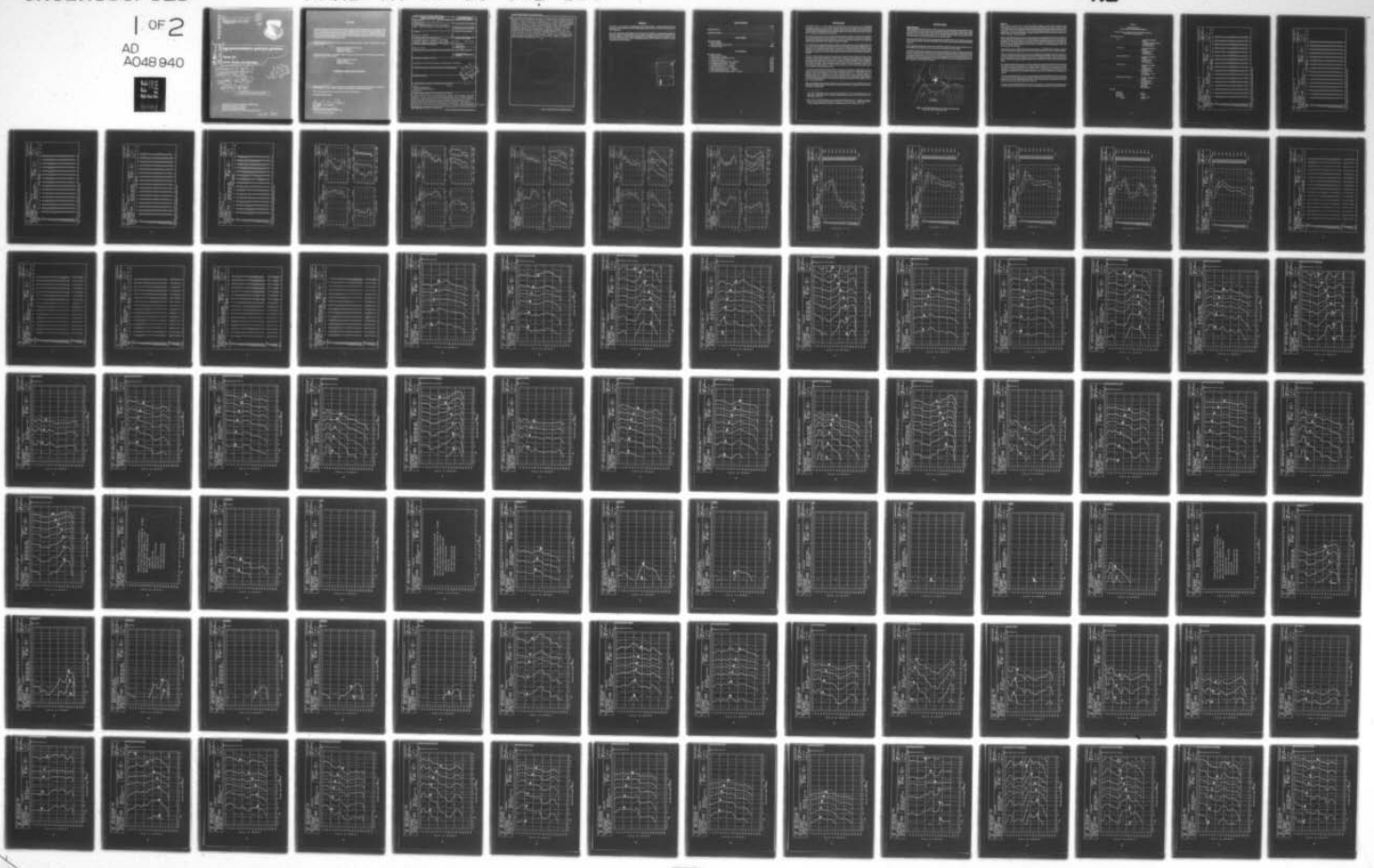

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## Volume 101.

## KC-97L Aircraft, Far-Field Noise.



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FOR THE COMMANDER

HENNING E. VON GIERKE
Director
Biodynamics and Bionics Division
Aerospace Medical Research Laboratory

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The USAF KC-97L is a multipurpose cargo (fuel/troops) aircraft powered by four R-4360-59B reciprocating and two J47-25A turbojet engines. This report provides far-field measured and extrapolated data defining both physical and psychoacoustic measures of the bioacoustic environments produced by this aircraft operating on a ground runup pad for five engine/power conditions. Far-field data measured at 17 locations are normalized to standard meteorological

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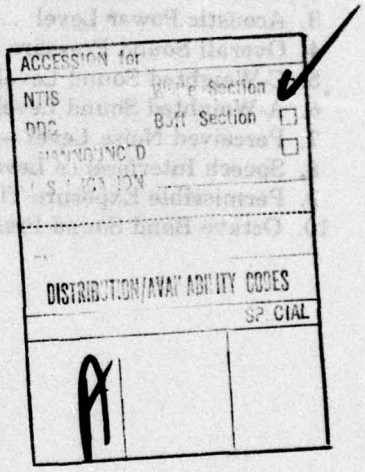
conditions and extrapolated from 75-8000 meters to derive sets of equal-value contours as a function of angle and distance from the source. These contours are measures of: overall and band sound pressure levels, C-weighted and A-weighted sound levels, preferred speech interference level, perceived noise level, and limiting times for total daily exposure of personnel with and without standard Air Force ear protectors. Refer to Volume 1 of this handbook, "USAF Bioenvironmental Noise Data Handbook, Vol 1: Organization, Content and Application", AMRL-TR-75-50(1) 1975, for discussion of the objective and design of the handbook, the types of data presented, measurement procedures, instrumentation, data processing, definitions of quantities, symbols, equations, applications, limitations, etc.

## PREFACE

**This report was prepared by the Biodynamic Environment Branch, Aerospace Medical Research Laboratory, under Project/Task 723104, Measurement and Prediction of Noise Environments of Air Force Operations.**

**The author gratefully acknowledges Mr. John Cole for his assistance in preparing this report, Mr. Robert Lee and Mr. Jerry Speakman for their assistance in acquiring the raw data, Mr. Keith Kettler, Mr. Henry Mohlman and Mr. David Eilerman of the University of Dayton for assistance in the mechanics of data processing, and Mrs. Peggy Massie and Mr. Mike Patterson for assistance in typing and preparation of the graphics.**



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## INTRODUCTION

The USAF KC-97L is a multi-purpose cargo (fuel/troops) aircraft powered by four R-4360-59B reciprocating and two J47-25A turbojet engines. The aircraft was manufactured by the Boeing Company, the reciprocating engines were manufactured by the Pratt and Whitney Aircraft Division of the United Aircraft Corporation, and the turbojet engines by the General Electric Company, Packard Motors Company, and Studebaker Corporation.

This volume provides measured and extrapolated data defining bioacoustic environments produced by this aircraft during ground runup operations. Such data are essential to evaluate ear protection requirements, limiting personnel exposure times, voice communication capabilities, and annoyance problems associated with ground runups of the KC-97L aircraft.

This volume is one of a series published by the AMRL under the same report number (AMRL-TR-75-50) as a multi-volume handbook that quantifies the noise environments produced at flight/ground crew locations and in surrounding communities by operations of Air Force aircraft and ground support equipment. The far-field, community-type, noise data in the handbook describe the noise produced during *ground operations* of aircraft, ground support equipment, and other ground-based equipment or facilities.

Volume 1 of this handbook discusses the objectives and design of the handbook, the types of data presented, measurement procedures, instrumentation, data processing, definitions of quantities, symbols, equations, applications, limitations, etc. Volume 2 provides a method and data for adjusting the handbook's far-field noise data, which are for standard meteorological conditions (15 C temperature, 70% relative humidity, 0.760 meter Hg barometric pressure), to derive comparable data for other meteorological conditions. *Refer to Volumes 1 and 2* (references 1 and 2) for such information because it is not repeated in other handbook volumes.

A cumulative index lists those aerospace systems contained in the handbook, and identifies the specific volumes containing each type of environmental noise data available (i.e., inflight/flight crew and passenger noise, near-field/ground crew noise, far-field/community noise). Volume numbers are assigned sequentially as individual volumes are published. This index is periodically updated as individual volumes are published and is available upon request from AMRL/BBE, Wright-Patterson AFB, OH 45433. Organizations on the distribution list for the handbook will automatically receive a copy of each updated index.

Direct any questions concerning the technical data in this report and other handbook volumes to: AMRL/BBE, Wright-Patterson AFB, OH 45433; AUTOVON 78-53675 or 78-53664; Commercial (513) 255-3675 or (513) 255-3664.

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1. Cole, John N., *USAF Bioenvironmental Noise Data Handbook, Volume 1: Organization, Content and Application,* AMRL-TR-75-50 (1) Aerospace Medical Research Laboratory, Wright-Patterson Air Force Base, Ohio, 1975.

2. Cole, John N., *USAF Bioenvironmental Noise Data Handbook, Volume 2: Procedure to Evaluate Effects of Non-standard Meteorological Conditions on Far-Field Noise,* AMRL-TR-75-50 (2), Aerospace Medical Research Laboratory, Wright-Patterson Air Force Base, Ohio, 1975.

## FAR-FIELD NOISE

### MEASUREMENTS

AMRL acquired far-field data during a 1-hour test period, thus keeping similar meteorological conditions throughout the test. Figure 1 shows the ground runup area (taxiway), ground cover, aircraft orientation and microphone measurement sites on the semicircle. The center of the 75 meter radius semicircle used in surveying the engines was on the ground directly below the intersection of the aircraft's centerline and the propeller plane of the inboard engines.

Table 1 provides cockpit readouts of engine characteristics (RPM, fuel flow, etc.) for each power setting used in the far-field tests. Also listed in this table are the surface meteorological conditions during data acquisition.

All microphone measurement sites are in the acoustic far-field of the source where the sound wavefronts spherically diverge and the noise source may be regarded as a point source.

A portable microphone/tape-recorder system was used to sequentially record the noise at each far-field location. The microphone was attached to a hand-held pole, pointed at the source (0° angle of incidence) and vertically scanned from 0.5 to 3 meters for a period of 5-10 seconds during data acquisition at each microphone location. These samples were then time-integrated to derive a root-mean-square sound pressure level. Vertical scanning and time-integrating together reduce anomalies frequently present in data acquired by a fixed height microphone.

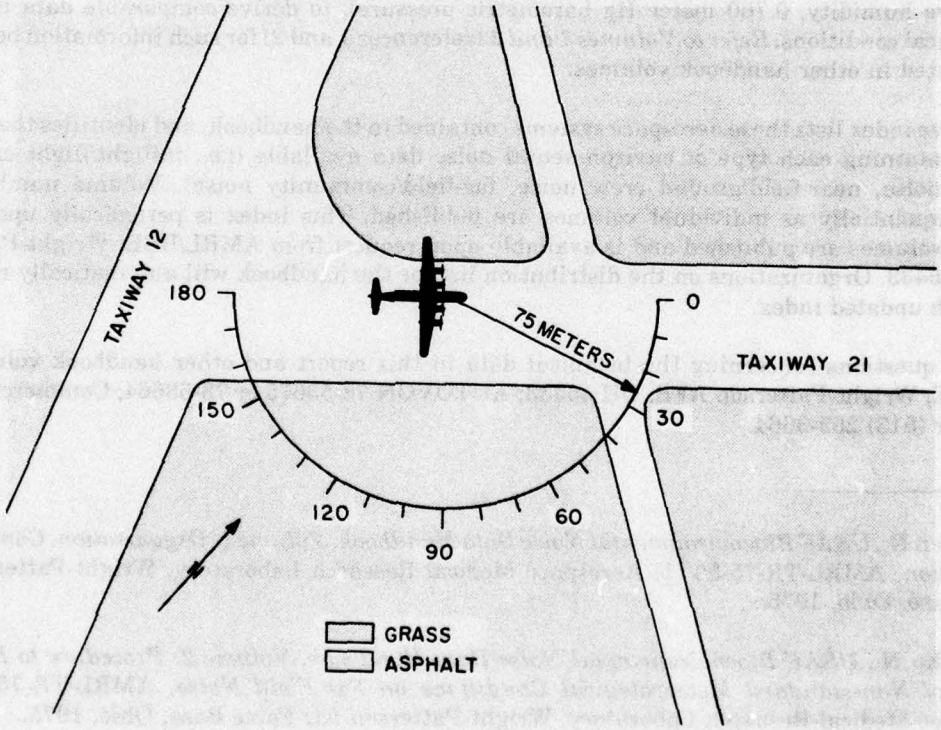



**Figure 1. Far-Field Measurement Locations on the Taxiway**
Wright-Patterson Air Force Base, Ohio

## RESULTS

Table 2 lists the overall and 1/3 octave band SPL measured at the far-field locations under meteorological conditions at the time of the test. Data in all other figures and tables are based on these levels. These data were normalized to 100 meters distance and standard meteorological conditions (15 C temperature, 70% relative humidity, 0.760 meter Hg barometric pressure) and used to derive the graphic data in Figure 2, which provides a compact summary of the far-field noise characteristics of the KC-97L aircraft in a standard format.

Figure 3 and Table 3 present two basic acoustic measures, the acoustic power level and the directivity index, respectively. The acoustic power level describes the power radiated by the source as a function of frequency. The directivity index is a standard acoustical engineering measure that describes the geometric way in which the source radiates this power as a function of both frequency and angle from source. These basic source measures are primarily of interest for acoustical engineers and noise generation/control specialists.

Estimates of the noise levels for intermediate power settings (e.g., 2200 RPM) and/or different number of engines operating (e.g., single engine) can be determined as explained in Volume 1 of this handbook.

Figures 4 through 10 are sets of equal noise contours describing seven different measures of noise as a function of angle and distance from the source for standard day meteorology. They are, respectively, overall sound pressure level, C-weighted sound level, A-weighted sound level, perceived noise level, speech interference level, permissible exposure times for personnel and octave band sound pressure levels.

Data excessively influenced by spurious background/electronic noise were eliminated from all figures and tables. No data are presented at the 170/180 degree locations for the idle power nor at the 160/170/180 locations for the other power settings because of turbulent air flow behind the aircraft. Typically, the A-weighted levels for these angles are 5 to 10 dBA below the level measured at the preceding microphone location for reciprocating engines noise and 10 to 20 dBA for the combination of engines.

Test personnel performed noise surveys during quiet periods when the background noise was minimal, e.g., early in the morning when no other aircraft or engine test stands were operating. Data eliminated because they were near the background/electronic noise were generally not significant because the levels were so low (e.g., Table 2, idle power with jets).

Volume 2 of the handbook describes the influence of meteorology on far-field noise environments, and provides, if required, the factors necessary to adjust the handbook's standard meteorological day data.

## TABLE 1

### TEST CONDITIONS FOR FAR-FIELD NOISE MEASUREMENTS

KC-97L Aircraft, Ground Runups, Wright-Patterson AFB, OH
Tail #52918, 4 September 1974

*Aircraft Engine Operation*

| | |
|---|---|
| Idle | All Reciprocating Engines<br>900 RPM<br>17 Inches Hg, Manifold Pressure<br>350 LBS/HR, Fuel Flow<br>No Turbojet Engines |
| Power Check | All Reciprocating Engines<br>2050 RPM<br>29 Inches Hg, MAP<br>750 LBS/HR, FF<br>No Turbojet Engines |
| Maximum Recip Power | All Reciprocating Engines<br>2650 RPM<br>58 Inches Hg, MAP<br>2400 LBS/HR, FF<br>No Turbojet Engines |
| Idle (With Jets) | All Reciprocating Engines<br>900 RPM<br>18 Inches Hg, MAP<br>350 LBS/HR, FF<br>Both Turbojet Engines<br>40 %RPM<br>540 C, Exhaust Gas Temp<br>1100 LBS/HR, FF |
| Maximum Power (With Jets) | All Reciprocating Engines<br>2650 RPM<br>58 Inches Hg, MAP<br>2400 LBS/HR, FF<br>Both Turbojet Engines<br>100 % RPM<br>690 C, EGT<br>6000 LBS/HR, FF |

*Meteorology*

| | |
|---|---|
| Temperature | 17.2 C |
| Bar Pressure | 0.767 M Hg |
| Rel Humidity | 50 % |
| Wind — Speed | 4.1 M/Sec (8 Kts) |
| — Direction | 060 Deg |

TABLE: 2

MEASURED SOUND PRESSURE LEVEL (DB)
1/3 OCTAVE BAND
DISTANCE = 75 METERS

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 01
11 AUG 76
PAGE 2

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER
900 RPM ALL RECIP ENGINES
NO JET ENGINES

METEOROLOGY:
TEMP = 17 C
BAR PRESS = .767 M HG
REL HUMID = 50 %

| FREQ (HZ) | ANGLE (DEGREES) 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | 170 | 180 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 25 | 79 | 78 | 79 | 77 | 78 | 79 | 78 | 79 | 80 | 78 | 78 | 77< | 76< | 76< | 75< | 74< | 74< | | |
| 31.5 | 83 | 81 | 81 | 81 | 80 | 82 | 82 | 85 | 86 | 88 | 85 | 84 | 82 | 80 | 82 | 78 | 79 | | |
| 40 | 80 | 80 | 80 | 79 | 78 | 78 | 79 | 80 | 81 | 78 | 78 | 80 | 79 | 77< | 75< | 77< | 75< | | |
| 50 | 80 | 80 | 82 | 80 | 80 | 82 | 80 | 78 | 79 | 79 | 79 | 79 | 77 | 77 | 79 | 77 | 77 | | |
| 63 | 79 | 79 | 78 | 79 | 79 | 79 | 78 | 78 | 79 | 79 | 79 | 77 | 78 | 80 | 78 | 78 | 74< | | |
| 80 | 87 | 87 | 88 | 89 | 89 | 89 | 92 | 91 | 89 | 87 | 88 | 87 | 87 | 89 | 86 | 86 | 82 | | |
| 100 | 89 | 89 | 90 | 89 | 91 | 90 | 93 | 91 | 90 | 90 | 91 | 91 | 89 | 89 | 88 | 88 | 85 | | |
| 125 | 84 | 84 | 86 | 85 | 84 | 84 | 86 | 86 | 86 | 83 | 85 | 85 | 86 | 86 | 86 | 84 | 82 | | |
| 160 | 81 | 80 | 82 | 80 | 80 | 79 | 80 | 80 | 78 | 76 | 77 | 79 | 79 | 79 | 79 | 80 | 75 | | |
| 200 | 76 | 75 | 76 | 74 | 74 | 73 | 73 | 73 | 72 | 69 | 69 | 70 | 71 | 72 | 74 | 73 | 68 | | |
| 250 | 74 | 72 | 75 | 72 | 70 | 70 | 70 | 69 | 67 | 63 | 64 | 64 | 68 | 69 | 70 | 70 | 65 | | |
| 315 | 71 | 69 | 72 | 68 | 68 | 67 | 65 | 64 | 60 | 61 | 58 | 59 | 63 | 66 | 67 | 68 | 64 | | |
| 400 | 71 | 67 | 70 | 67 | 65 | 64 | 61 | 59 | 56< | 56< | 55< | 57< | 60 | 62 | 65 | 68 | 63 | | |
| 500 | 68 | 65 | 67 | 65 | 61 | 61 | 57< | 58< | 55< | 56< | 55< | 58< | 59 | 62 | 66 | 69 | 63 | | |
| 630 | 65 | 61 | 64 | 63 | 57< | 58 | 56< | 57< | 54< | 55< | 52< | 54< | 55< | 55< | 57< | 62 | 54< | | |
| 800 | 61 | 59 | 63 | 61 | 56< | 57< | 53< | 56< | 53< | 54< | 53< | 55< | 55< | 55< | 56< | 59 | 53< | | |
| 1000 | 60 | 58 | 61 | 59 | 55< | 55< | 52< | 55< | 52< | 52< | 52< | 52< | 53< | 54< | 56 | 57 | 52< | | |
| 1250 | 62 | 58 | 63 | 61 | 57 | 56 | 53< | 56 | 54< | 53< | 52< | 52< | 54< | 55< | 56 | 56 | 51< | | |
| 1600 | 70 | 60 | 68 | 65 | 59 | 57 | 54 | 58 | 57 | 55 | 54 | 56 | 57 | 58 | 58 | 57 | 52 | | |
| 2000 | 60 | 57 | 59 | 58 | 55 | 54 | 52 | 56 | 54 | 52 | 52 | 53 | 54 | 56 | 57 | 58 | 53 | | |
| 2500 | 59 | 56 | 59 | 58 | 55 | 54 | 52 | 55 | 54 | 52 | 52 | 53 | 55 | 56 | 58 | 57 | 51 | | |
| 3150 | 60 | 56 | 59 | 58 | 55 | 54 | 53 | 56 | 54 | 53 | 53 | 55 | 56 | 59 | 60 | 58 | 52 | | |
| 4000 | 57 | 54 | 57 | 57 | 54 | 53 | 52 | 55 | 53 | 52 | 53 | 54 | 54 | 58 | 59 | 57 | 50 | | |
| 5000 | 54 | 51 | 54 | 54 | 51 | 51 | 49 | 52 | 50 | 49 | 50 | 51 | 52 | 56 | 57 | 55 | 48 | | |
| 6300 | 50 | 48 | 50 | 50 | 48 | 48 | 47 | 49 | 48 | 47 | 47 | 48 | 49 | 53 | 54 | 52 | 46 | | |
| 8000 | 49< | 47< | 48< | 48< | 46< | 46< | 45< | 47< | 45< | 45< | 44< | 44< | 45< | 48< | 49< | 47< | 41< | | |
| 10000 | 46< | 45< | 46< | 47< | 45< | 45< | 45< | 46< | 45< | 42< | 41< | 41< | 41< | 42< | 44< | 42< | 40< | | |
| OVERALL | 93 | 93 | 95 | 94 | 94 | 94 | 96 | 95 | 95 | 94 | 95 | 94 | 93 | 94 | 93 | 92 | 90 | | |

< LEVEL CORRECTED TO REMOVE BACKGROUND/ELECTRONIC NOISE.

TABLE: 2

MEASURED SOUND PRESSURE LEVEL (DB)
1/3 OCTAVE BAND
DISTANCE = 75 METERS

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 02
11 AUG 76
PAGE 2

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
POWER CHECK
2050 RPM ALL RECIP ENGS
NO JET ENGINES

METEOROLOGY:
TEMP = 17 C
BAR PRESS = .767 M HG
REL HUMID = 50 %

| FREQ (HZ) | ANGLE (DEGREES) 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | 170 | 180 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 25 | 77 | 77 | 75< | 76< | 78 | 77 | 76< | 75< | 77 | 75< | 74< | 71< | 71< | 71< | 71< | 71< | | | |
| 31.5 | 78 | 77 | 76 | 76 | 76 | 77 | 79 | 81 | 81 | 82 | 81 | 82 | 80 | 80 | 82 | 79 | | | |
| 40 | 78 | 79 | 81 | 79 | 80 | 79 | 79 | 80 | 81 | 81 | 82 | 82 | 82 | 80 | 80 | 76< | | | |
| 50 | 93 | 95 | 94 | 95 | 96 | 95 | 95 | 96 | 100 | 99 | 101 | 100 | 100 | 97 | 96 | 90 | | | |
| 63 | 82 | 85 | 84 | 91 | 85 | 85 | 85 | 84 | 86 | 88 | 89 | 88 | 89 | 87 | 87 | 82 | | | |
| 80 | 87 | 90 | 92 | 93 | 94 | 92 | 97 | 94 | 94 | 97 | 95 | 95 | 95 | 94 | 89 | 87 | | | |
| 100 | 95 | 96 | 95 | 95 | 95 | 92 | 94 | 93 | 90 | 94 | 94 | 93 | 93 | 92 | 88 | 89 | | | |
| 125 | 87 | 89 | 87 | 91 | 87 | 85 | 85 | 85 | 85 | 82 | 85 | 85 | 85 | 85 | 87 | 81 | | | |
| 160 | 94 | 96 | 98 | 93 | 93 | 94 | 95 | 92 | 92 | 88 | 93 | 94 | 92 | 93 | 91 | 86 | | | |
| 200 | 96 | 96 | 96 | 93 | 93 | 90 | 94 | 92 | 90 | 88 | 91 | 91 | 91 | 90 | 91 | 86 | | | |
| 250 | 93 | 95 | 94 | 92 | 88 | 87 | 88 | 84 | 83 | 78 | 79 | 80 | 82 | 84 | 85 | 79 | | | |
| 315 | 91 | 94 | 92 | 89 | 88 | 89 | 87 | 82 | 81 | 77 | 76 | 78 | 83 | 83 | 83 | 77 | | | |
| 400 | 93 | 95 | 93 | 93 | 90 | 90 | 86 | 82 | 80 | 78 | 77 | 78 | 82 | 83 | 83 | 80 | | | |
| 500 | 90 | 93 | 90 | 92 | 88 | 86 | 85 | 82 | 81 | 81 | 79 | 79 | 81 | 83 | 82 | 79 | | | |
| 630 | 87 | 91 | 88 | 91 | 85 | 84 | 85 | 82 | 81 | 81 | 78 | 80 | 81 | 83 | 81 | 78 | | | |
| 800 | 86 | 88 | 88 | 88 | 85 | 84 | 85 | 83 | 83 | 80 | 79 | 79 | 80 | 83 | 81 | 79 | | | |
| 1000 | 84 | 85 | 87 | 86 | 84 | 83 | 83 | 83 | 83 | 79 | 78 | 79 | 80 | 82 | 80 | 77 | | | |
| 1250 | 83 | 84 | 85 | 85 | 83 | 82 | 83 | 83 | 84 | 79 | 79 | 79 | 80 | 81 | 79 | 75 | | | |
| 1600 | 83 | 85 | 85 | 85 | 84 | 83 | 83 | 83 | 85 | 79 | 79 | 80 | 80 | 80 | 78 | 74 | | | |
| 2000 | 81 | 83 | 83 | 84 | 84 | 84 | 83 | 83 | 84 | 79 | 78 | 79 | 79 | 79 | 76 | 73 | | | |
| 2500 | 81 | 82 | 83 | 83 | 84 | 84 | 84 | 83 | 84 | 79 | 79 | 79 | 79 | 79 | 75 | 72 | | | |
| 3150 | 81 | 81 | 83 | 83 | 84 | 85 | 84 | 84 | 84 | 81 | 80 | 80 | 80 | 79 | 75 | 72 | | | |
| 4000 | 81 | 82 | 83 | 84 | 84 | 85 | 84 | 84 | 83 | 80 | 77 | 77 | 78 | 77 | 74 | 72 | | | |
| 5000 | 78 | 79 | 81 | 81 | 82 | 82 | 82 | 81 | 80 | 77 | 74 | 74 | 74 | 73 | 70 | 68 | | | |
| 6300 | 76 | 77 | 79 | 79 | 80 | 80 | 79 | 79 | 78 | 76 | 72 | 71 | 72 | 71 | 69 | 67 | | | |
| 8000 | 74 | 75 | 77 | 78 | 78 | 79 | 77 | 78 | 76 | 72 | 69 | 68 | 69 | 67 | 66 | 64 | | | |
| 10000 | 72 | 74 | 76 | 77 | 76 | 77 | 76 | 76 | 75 | 68 | 65 | 63 | 63 | 62 | 61 | 59 | | | |
| OVERALL | 103 | 105 | 105 | 104 | 103 | 102 | 103 | 102 | 103 | 103 | 104 | 103 | 103 | 102 | 100 | 96 | | | |

< LEVEL CORRECTED TO REMOVE BACKGROUND/ELECTRONIC NOISE.

TABLE 2: MEASURED SOUND PRESSURE LEVEL (DB)
1/3 OCTAVE BAND
DISTANCE = 75 METERS

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 03
11 AUG 76
PAGE 2

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-598 RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM RECIP POWER
2650 RPM ALL RECIP ENGS
NO JET ENGINES

METEOROLOGY:
TEMP = 17 C
BAR PRESS = .767 M HG
REL HUMID = 50 %

| FREQ (HZ) | ANGLE (DEGREES) 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | 170 | 180 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 25 | 80 | 80 | 80 | 80 | 78 | 80 | 80 | 83 | 82 | 82 | 82 | 81 | 82 | 80 | 81 | 76< | | | |
| 31.5 | 83 | 84 | 84 | 83 | 83 | 80 | 84 | 83 | 84 | 83 | 83 | 82 | 80 | 81 | 81 | 79 | | | |
| 40 | 82 | 83 | 82 | 82 | 82 | 85 | 85 | 85 | 89 | 86 | 85 | 89 | 93 | 92 | 92 | 92 | | | |
| 50 | 84 | 85 | 86 | 83 | 84 | 85 | 86 | 86 | 91 | 93 | 91 | 92 | 92 | 91 | 88 | 87 | | | |
| 63 | 101 | 104 | 106 | 102 | 103 | 104 | 102 | 106 | 114 | 116 | 114 | 115 | 114 | 112 | 107 | 105 | | | |
| 80 | 89 | 91 | 93 | 91 | 91 | 92 | 94 | 94 | 100 | 102 | 100 | 101 | 100 | 99 | 95 | 93 | | | |
| 100 | 93 | 93 | 94 | 92 | 92 | 92 | 95 | 97 | 95 | 98 | 99 | 102 | 104 | 102 | 100 | 97 | | | |
| 125 | 101 | 102 | 105 | 104 | 102 | 101 | 98 | 106 | 109 | 110 | 110 | 104 | 104 | 102 | 98 | 97 | | | |
| 160 | 97 | 96 | 97 | 95 | 94 | 97 | 96 | 98 | 99 | 99 | 101 | 101 | 105 | 103 | 101 | 96 | | | |
| 200 | 102 | 104 | 102 | 98 | 95 | 96 | 96 | 98 | 103 | 103 | 99 | 96 | 100 | 98 | 96 | 87 | | | |
| 250 | 102 | 99 | 101 | 98 | 95 | 94 | 94 | 91 | 92 | 94 | 96 | 95 | 93 | 95 | 92 | 88 | | | |
| 315 | 100 | 99 | 99 | 94 | 95 | 93 | 92 | 88 | 90 | 94 | 95 | 93 | 90 | 90 | 90 | 86 | | | |
| 400 | 102 | 99 | 97 | 96 | 96 | 95 | 91 | 88 | 91 | 94 | 91 | 92 | 87 | 90 | 91 | 87 | | | |
| 500 | 99 | 98 | 97 | 97 | 95 | 92 | 93 | 92 | 94 | 93 | 92 | 92 | 89 | 91 | 91 | 89 | | | |
| 630 | 97 | 95 | 96 | 96 | 94 | 90 | 94 | 93 | 94 | 92 | 91 | 90 | 89 | 91 | 90 | 88 | | | |
| 800 | 96 | 94 | 95 | 94 | 94 | 92 | 95 | 96 | 95 | 93 | 90 | 90 | 89 | 91 | 92 | 89 | | | |
| 1000 | 94 | 92 | 94 | 92 | 93 | 91 | 94 | 95 | 95 | 92 | 91 | 90 | 89 | 91 | 90 | 86 | | | |
| 1250 | 93 | 92 | 93 | 93 | 92 | 93 | 95 | 95 | 95 | 93 | 91 | 91 | 90 | 90 | 90 | 85 | | | |
| 1600 | 93 | 92 | 93 | 94 | 94 | 94 | 95 | 96 | 96 | 93 | 91 | 92 | 91 | 90 | 89 | 86 | | | |
| 2000 | 93 | 92 | 93 | 94 | 94 | 94 | 95 | 96 | 95 | 93 | 91 | 91 | 91 | 89 | 89 | 86 | | | |
| 2500 | 93 | 92 | 93 | 94 | 94 | 95 | 95 | 96 | 95 | 94 | 92 | 92 | 91 | 90 | 89 | 86 | | | |
| 3150 | 92 | 91 | 93 | 93 | 94 | 94 | 95 | 95 | 95 | 94 | 92 | 92 | 91 | 91 | 89 | 87 | | | |
| 4000 | 91 | 91 | 93 | 94 | 94 | 94 | 95 | 94 | 94 | 92 | 91 | 91 | 90 | 89 | 88 | 85 | | | |
| 5000 | 88 | 87 | 90 | 90 | 91 | 91 | 91 | 91 | 90 | 89 | 87 | 86 | 86 | 85 | 84 | 82 | | | |
| 6300 | 86 | 85 | 87 | 87 | 88 | 88 | 88 | 88 | 87 | 87 | 84 | 84 | 84 | 83 | 82 | 80 | | | |
| 8000 | 83 | 83 | 86 | 86 | 86 | 87 | 86 | 86 | 85 | 84 | 81 | 81 | 81 | 80 | 79 | 77 | | | |
| 10000 | 82 | 80 | 83 | 84 | 85 | 85 | 84 | 85 | 84 | 78 | 76 | 75 | 75 | 74 | 74 | 71 | | | |
| OVERALL | 111 | 111 | 112 | 110 | 109 | 109 | 109 | 111 | 116 | 118 | 116 | 116 | 115 | 114 | 110 | 107 | | | |

< LEVEL CORRECTED TO REMOVE BACKGROUND/ELECTRONIC NOISE.

TABLE: 2

MEASURED SOUND PRESSURE LEVEL (DB)
1/3 OCTAVE BAND
DISTANCE = 75 METERS

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 04
11 AUG 76
PAGE 2

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER, ALL ENGINES
900 RPM ALL RECIP ENGS
40% RPM BOTH AUX JET ENGS

METEOROLOGY:
TEMP = 17 C
BAR PRESS = .767 M HG
REL HUMID = 50 %

| FREQ (HZ) | ANGLE (DEGREES) 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | 170 | 180 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 25 | 80 | 83 | 82 | 80 | 82 | 80 | 81 | 80 | 81 | 85 | 79 | 78 | 76< | 80 | 76< | 80 | 76< | | |
| 31.5 | 83 | 84 | 83 | 82 | 82 | 81 | 83 | 84 | 87 | 87 | 86 | 85 | 82 | 81 | 81 | 78 | 77 | | |
| 40 | 80 | 80 | 79 | 78 | 78 | 78 | 80 | 81 | 82 | 80 | 80 | 80 | 79 | 77< | 78 | 75< | 75< | | |
| 50 | 81 | 81 | 80 | 79 | 79 | 81 | 80 | 78 | 81 | 80 | 79 | 79 | 78 | 78 | 78 | 75< | 72< | | |
| 63 | 78 | 82 | 80 | 80 | 80 | 81 | 89 | 82 | 84 | 81 | 83 | 80 | 89 | 82 | 78 | 76< | 70< | | |
| 80 | 85 | 87 | 88 | 88 | 88 | 87 | 89 | 89 | 87 | 90 | 88 | 86 | 88 | 85 | 83 | 80 | 76 | | |
| 100 | 90 | 92 | 95 | 94 | 93 | 93 | 95 | 93 | 90 | 92 | 92 | 92 | 93 | 92 | 88 | 87 | 84 | | |
| 125 | 84 | 85 | 86 | 85 | 84 | 84 | 85 | 85 | 86 | 84 | 84 | 84 | 86 | 85 | 84 | 82 | 78 | | |
| 160 | 81 | 83 | 84 | 83 | 81 | 81 | 80 | 82 | 81 | 78 | 79 | 80 | 80 | 78 | 78 | 78 | 73 | | |
| 200 | 78 | 80 | 78 | 77 | 75 | 75 | 75 | 76 | 75 | 72 | 72 | 73 | 75 | 75 | 74 | 73 | 68 | | |
| 250 | 77 | 78 | 78 | 75 | 71 | 72 | 71 | 72 | 72 | 70 | 69 | 69 | 71 | 73 | 71 | 71 | 67 | | |
| 315 | 74 | 75 | 75 | 71 | 69 | 70 | 69 | 68 | 67 | 66 | 65 | 64 | 67 | 70 | 69 | 69 | 65 | | |
| 400 | 75 | 75 | 76 | 72 | 69 | 69 | 68 | 66 | 65 | 65 | 64 | 64 | 66 | 68 | 68 | 69 | 64 | | |
| 500 | 73 | 73 | 75 | 72 | 68 | 68 | 68 | 64 | 65 | 64 | 63 | 65 | 65 | 66 | 68 | 67 | 62 | | |
| 630 | 74 | 73 | 77 | 72 | 69 | 69 | 69 | 66 | 66 | 65 | 65 | 66 | 65 | 63 | 62 | 63 | 57< | | |
| 800 | 77 | 76 | 80 | 74 | 71 | 70 | 70 | 66 | 67 | 65 | 68 | 68 | 68 | 64 | 63 | 62 | 56< | | |
| 1000 | 78 | 77 | 82 | 75 | 73 | 71 | 70 | 71 | 69 | 65 | 74 | 73 | 66 | 64 | 62 | 61 | 55< | | |
| 1250 | 77 | 75 | 81 | 75 | 73 | 71 | 71 | 68 | 69 | 66 | 69 | 68 | 66 | 63 | 62 | 60 | 54< | | |
| 1600 | 79 | 79 | 84 | 77 | 74 | 73 | 73 | 70 | 70 | 67 | 69 | 68 | 65 | 63 | 62 | 60 | 54 | | |
| 2000 | 81 | 82 | 88 | 81 | 84 | 83 | 81 | 81 | 79 | 75 | 71 | 70 | 68 | 67 | 66 | 63 | 56 | | |
| 2500 | 86 | 88 | 95 | 87 | 89 | 90 | 88 | 85 | 84 | 80 | 72 | 73 | 71 | 70 | 69 | 66 | 60 | | |
| 3150 | 83 | 83 | 91 | 85 | 88 | 81 | 81 | 78 | 77 | 72 | 69 | 71 | 68 | 67 | 68 | 65 | 60 | | |
| 4000 | 80 | 79 | 85 | 78 | 80 | 80 | 76 | 75 | 73 | 71 | 68 | 72 | 66 | 65 | 63 | 60 | 54 | | |
| 5000 | 75 | 76 | 81 | 74 | 78 | 75 | 73 | 71 | 70 | 66 | 63 | 68 | 63 | 62 | 60 | 57 | 51 | | |
| 6300 | 72 | 71 | 77 | 71 | 71 | 71 | 70 | 68 | 68 | 61 | 59 | 62 | 58 | 57 | 56 | 53 | 47 | | |
| 8000 | 70 | 69 | 74 | 69 | 71 | 69 | 69 | 66 | 65 | 58 | 54 | 57 | 54 | 52< | 52< | 49< | 42< | | |
| 10000 | 68 | 67 | 71 | 66 | 68 | 66 | 66 | 64 | 63 | 56 | 48< | 51 | 48< | 46< | 46< | 43< | | | |
| OVERALL | 95 | 97 | 100 | 97 | 97 | 97 | 98 | 96 | 95 | 96 | 96 | 95 | 96 | 95 | 92 | 91 | 87 | | |

< LEVEL CORRECTED TO REMOVE BACKGROUND/ELECTRONIC NOISE.

TABLE: 2

MEASURED SOUND PRESSURE LEVEL (DB)
1/3 OCTAVE BAND
DISTANCE = 75 METERS

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 05
11 AUG 76
PAGE 2

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER, ALL ENGS
2650 RPM ALL RECIP ENGS
100% RPM BOTH AUX JET ENG

METEOROLOGY:
TEMP = 17 C
BAR PRESS = .767 M HG
REL HUMID = 50 %

| FREQ (HZ) | ANGLE (DEGREES) 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | 170 | 180 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 25 | 84 | 83 | 83 | 82 | 84 | 84 | 85 | 85 | 86 | 86 | 87 | 89 | 91 | 96 | 98 | 98 | | | |
| 31.5 | 86 | 84 | 83 | 84 | 84 | 85 | 86 | 85 | 88 | 87 | 88 | 89 | 93 | 97 | 99 | 99 | | | |
| 40 | 85 | 86 | 86 | 86 | 87 | 88 | 88 | 88 | 88 | 92 | 92 | 95 | 98 | 102 | 104 | 102 | | | |
| 50 | 89 | 88 | 87 | 86 | 88 | 87 | 89 | 89 | 91 | 94 | 96 | 97 | 100 | 102 | 106 | 102 | | | |
| 63 | 109 | 107 | 104 | 103 | 106 | 101 | 104 | 105 | 109 | 114 | 118 | 114 | 113 | 109 | 110 | 103 | | | |
| 80 | 96 | 94 | 93 | 91 | 94 | 93 | 95 | 94 | 96 | 100 | 104 | 102 | 105 | 111 | 112 | 105 | | | |
| 100 | 94 | 95 | 94 | 94 | 94 | 94 | 96 | 98 | 99 | 102 | 104 | 103 | 108 | 115 | 116 | 107 | | | |
| 125 | 104 | 105 | 106 | 103 | 106 | 100 | 99 | 104 | 106 | 110 | 111 | 107 | 109 | 115 | 116 | 104 | | | |
| 160 | 97 | 98 | 99 | 97 | 96 | 97 | 97 | 99 | 99 | 100 | 104 | 105 | 110 | 113 | 116 | 103 | | | |
| 200 | 106 | 105 | 104 | 100 | 99 | 97 | 97 | 96 | 98 | 102 | 103 | 104 | 109 | 111 | 114 | 101 | | | |
| 250 | 106 | 104 | 103 | 99 | 96 | 96 | 95 | 97 | 95 | 97 | 99 | 102 | 109 | 113 | 113 | 99 | | | |
| 315 | 102 | 101 | 101 | 97 | 96 | 95 | 95 | 94 | 95 | 97 | 97 | 101 | 107 | 111 | 110 | 96 | | | |
| 400 | 103 | 103 | 101 | 98 | 97 | 96 | 94 | 94 | 96 | 96 | 96 | 102 | 105 | 108 | 108 | 95 | | | |
| 500 | 101 | 100 | 99 | 98 | 96 | 94 | 92 | 96 | 97 | 95 | 97 | 102 | 104 | 107 | 104 | 94 | | | |
| 630 | 99 | 98 | 98 | 96 | 94 | 93 | 93 | 96 | 97 | 96 | 98 | 102 | 103 | 105 | 101 | 93 | | | |
| 800 | 98 | 97 | 97 | 95 | 93 | 94 | 94 | 97 | 97 | 97 | 100 | 102 | 104 | 105 | 102 | 93 | | | |
| 1000 | 96 | 95 | 96 | 94 | 92 | 93 | 94 | 97 | 97 | 98 | 101 | 103 | 104 | 105 | 101 | 92 | | | |
| 1250 | 95 | 95 | 95 | 93 | 93 | 94 | 95 | 98 | 97 | 98 | 101 | 104 | 105 | 104 | 100 | 90 | | | |
| 1600 | 96 | 95 | 96 | 94 | 93 | 95 | 96 | 98 | 98 | 100 | 101 | 104 | 105 | 104 | 100 | 90 | | | |
| 2000 | 96 | 95 | 96 | 94 | 93 | 96 | 96 | 98 | 98 | 100 | 101 | 103 | 104 | 102 | 99 | 88 | | | |
| 2500 | 96 | 95 | 96 | 94 | 94 | 96 | 96 | 98 | 98 | 100 | 100 | 102 | 104 | 101 | 99 | 87 | | | |
| 3150 | 95 | 95 | 95 | 94 | 93 | 95 | 96 | 98 | 98 | 101 | 99 | 101 | 104 | 101 | 98 | 87 | | | |
| 4000 | 95 | 95 | 96 | 94 | 93 | 95 | 96 | 97 | 97 | 99 | 98 | 100 | 102 | 100 | 97 | 85 | | | |
| 5000 | 93 | 93 | 93 | 91 | 91 | 92 | 93 | 95 | 94 | 96 | 95 | 97 | 99 | 97 | 94 | 82 | | | |
| 6300 | 89 | 90 | 90 | 88 | 88 | 89 | 90 | 92 | 92 | 94 | 94 | 96 | 97 | 96 | 91 | 79 | | | |
| 8000 | 88 | 88 | 88 | 86 | 86 | 88 | 88 | 90 | 90 | 92 | 92 | 93 | 96 | 94 | 90 | 76 | | | |
| 10000 | 85 | 87 | 87 | 85 | 84 | 86 | 87 | 90 | 86 | 89 | 89 | 90 | 92 | 91 | 86 | 72 | | | |
| OVERALL | 114 | 113 | 113 | 110 | 111 | 109 | 110 | 112 | 113 | 117 | 120 | 118 | 120 | 123 | 123 | 114 | | | |

LEVEL CORRECTED TO REMOVE BACKGROUND/ELECTRONIC NOISE.

FIGURE: NORMALIZED FARFIELD NOISE LEVELS

2 DISTANCE = 100 METERS

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER
900 RPM ALL RECIP ENGINES
NO JET ENGINES

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
ONEGA 1.4
TEST 75-002-016
RUN 01
11 AUG 76
PAGE 6

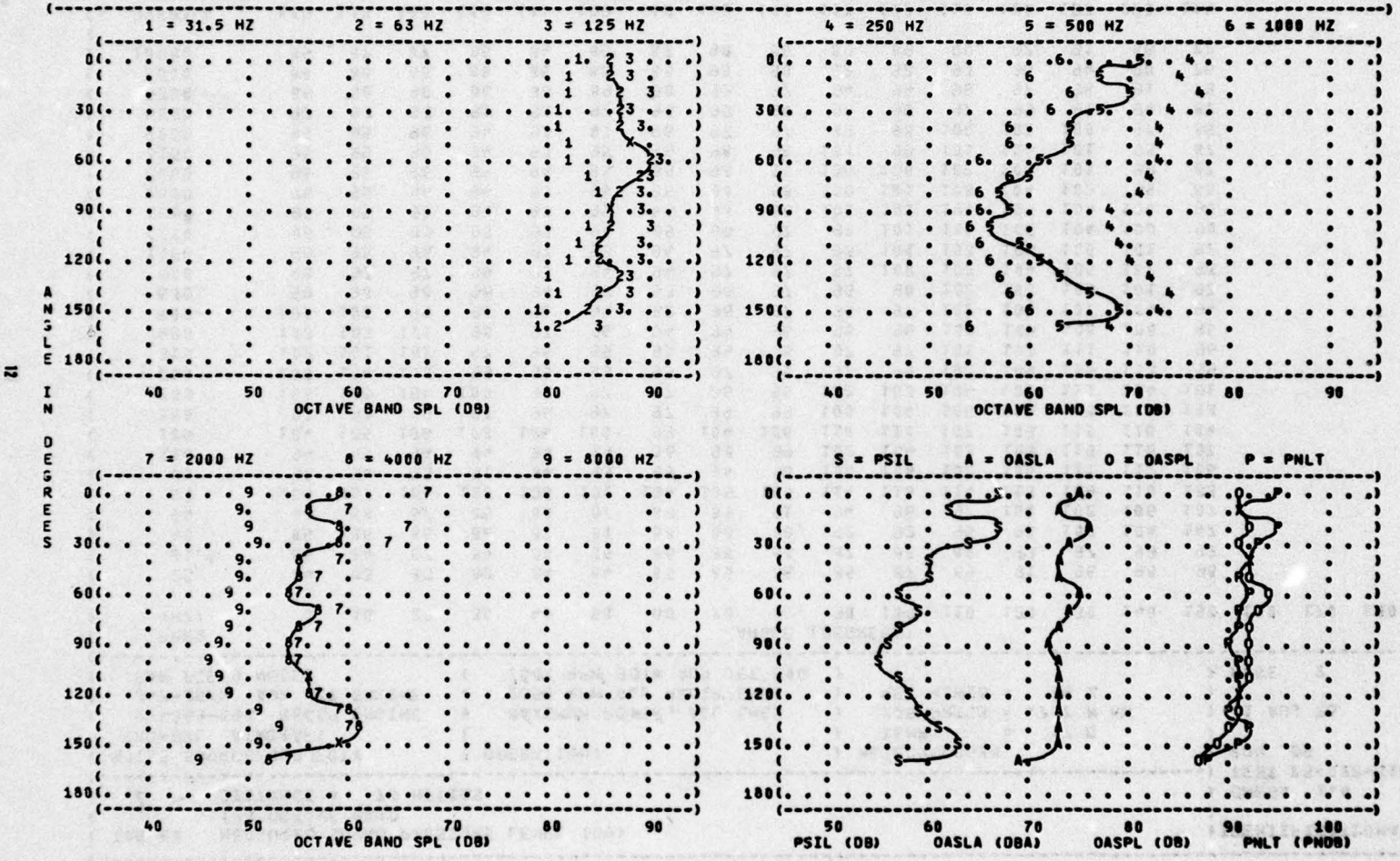


FIGURE: NORMALIZED FARFIELD NOISE LEVELS

2 DISTANCE = 100 METERS

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
POWER CHECK
2050 RPM ALL RECIP ENGS
NO JET ENGINES

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 02
11 AUG 76
PAGE 6

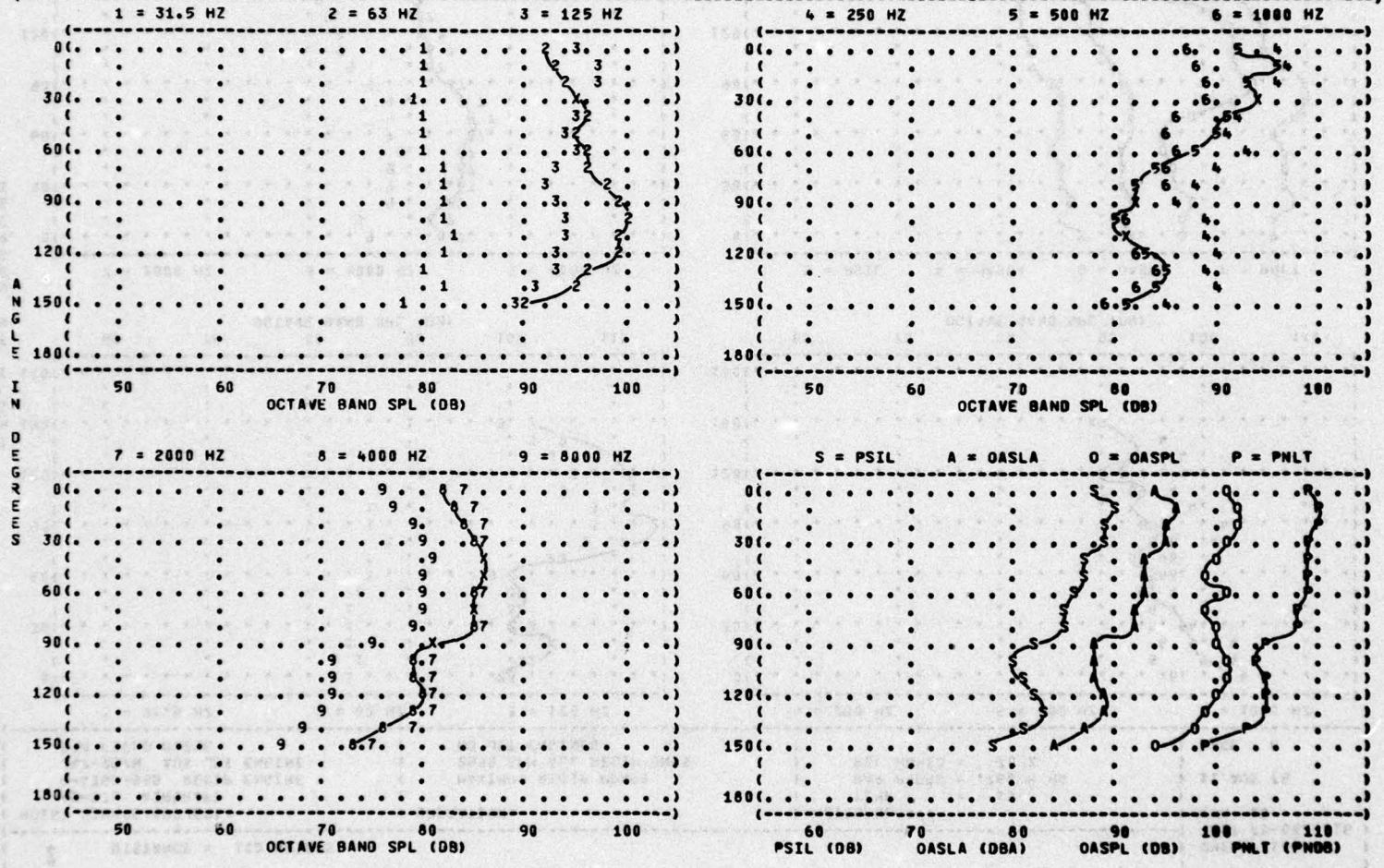


FIGURE: NORMALIZED FARFIELD NOISE LEVELS

2 DISTANCE = 100 METERS

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM RECIP POWER
2650 RPM ALL RECIP ENGS
NO JET ENGINES

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 03
11 AUG 76
PAGE 6

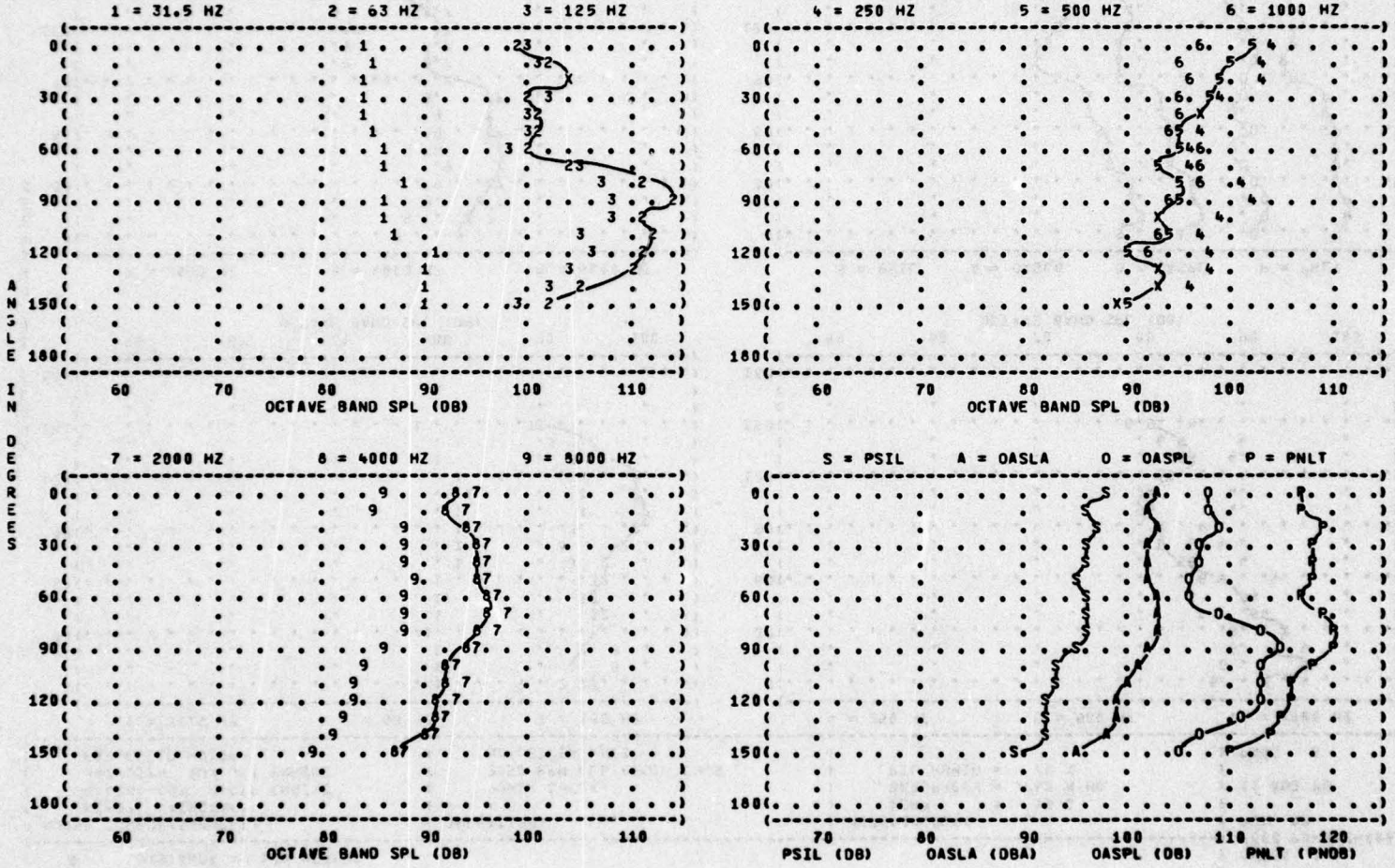


FIGURE: NORMALIZED FARFIELD NOISE LEVELS

2 DISTANCE = 100 METERS

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER, ALL ENGINES
900 RPM ALL RECIP ENGS
40% RPM BOTH AUX JET ENGS

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 04
11 AUG 76
PAGE 6

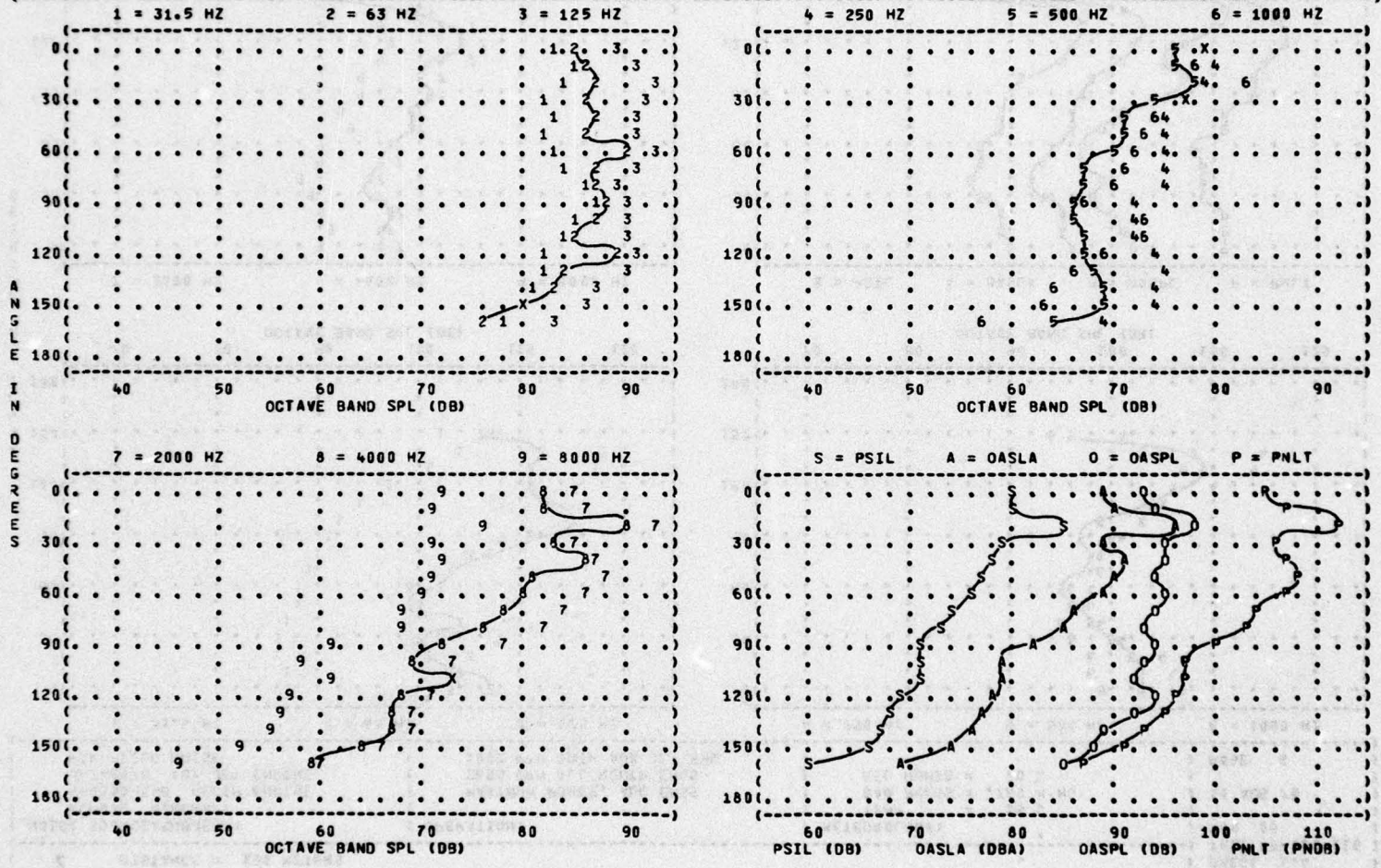


FIGURE: NORMALIZED FARFIELD NOISE LEVELS

2 DISTANCE = 100 METERS

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 05
11 AUG 76
PAGE 6

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER, ALL ENGS
2650 RPM ALL RECIP ENGS
100% RPM BOTH AUX JET ENG

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

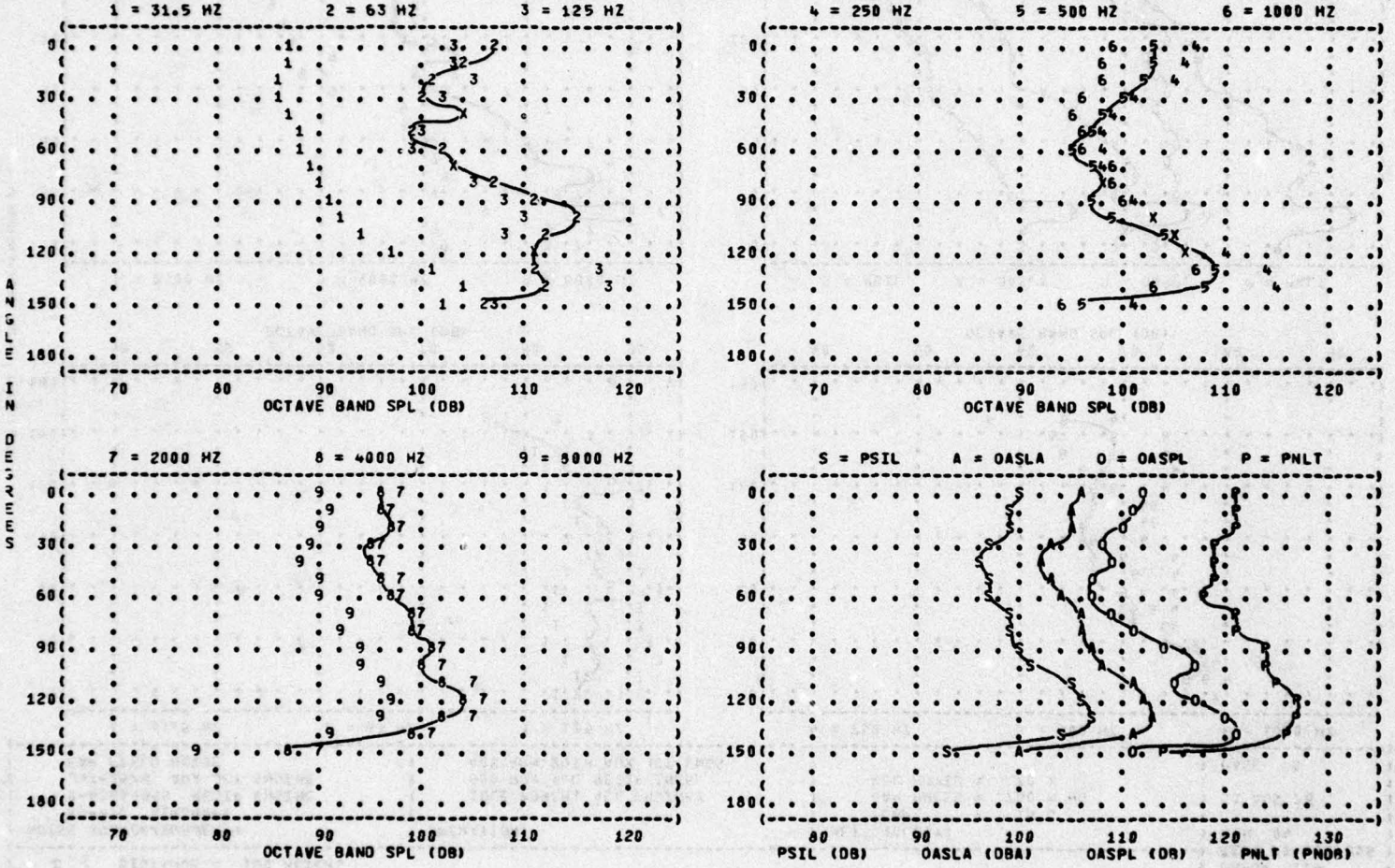


FIGURE: ACOUSTIC POWER LEVEL (PWL)

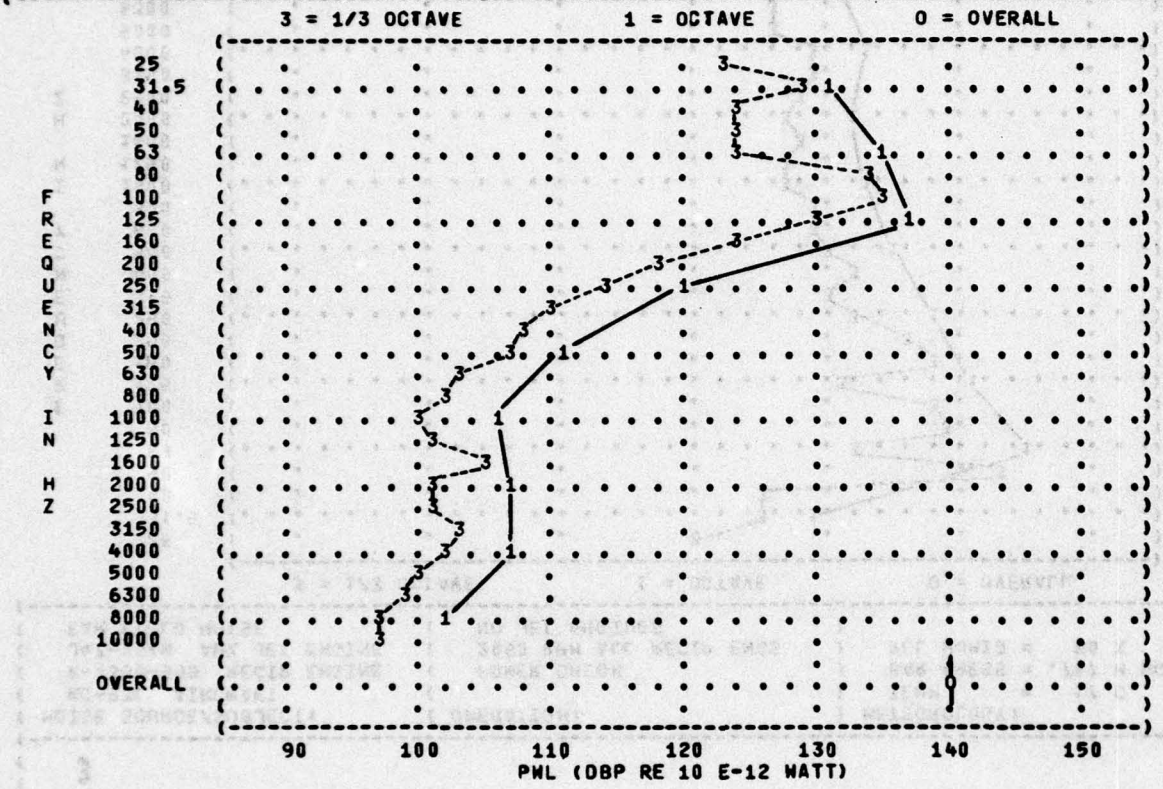
3

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER
900 RPM ALL RECIP ENGINES
NO JET ENGINES

METEOROLOGY:
TEMP = 17 C
BAR PRESS = .767 M HG
REL HUMID = 50 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-802-016
RUN 01
11 AUG 76
PAGE 3




| | PWL 1/3 OCTAVE | PWL OCTAVE |
|---|---|---|
| 25 | 122.9 | |
| 31.5 | 128.7 | 130.7 |
| 40 | 123.8 | |
| 50 | 124.1 | |
| 63 | 123.7 | 134.6 |
| 80 | 133.8 | |
| 100 | 135.3 | |
| 125 | 130.3 | 136.7 |
| 160 | 124.1 | |
| 200 | 117.5 | |
| 250 | 114.1 | 119.7 |
| 315 | 110.5 | |
| 400 | 108.2 | |
| 500 | 107.2 | 111.4 |
| 630 | 102.8 | |
| 800 | 101.5 | |
| 1000 | 100.2 | 105.9 |
| 1250 | 101.4 | |
| 1600 | 104.7 | |
| 2000 | 101.0 | 107.4 |
| 2500 | 101.2 | |
| 3150 | 102.8 | |
| 4000 | 102.4 | 106.7 |
| 5000 | 100.2 | |
| 6300 | 98.5 | |
| 8000 | 97.2 | 102.5 |
| 10000 | 97.3 | |
| OVERALL | | 139.5 |

FREQUENCY IN HZ

PWL (DBP RE 10 E-12 WATT)

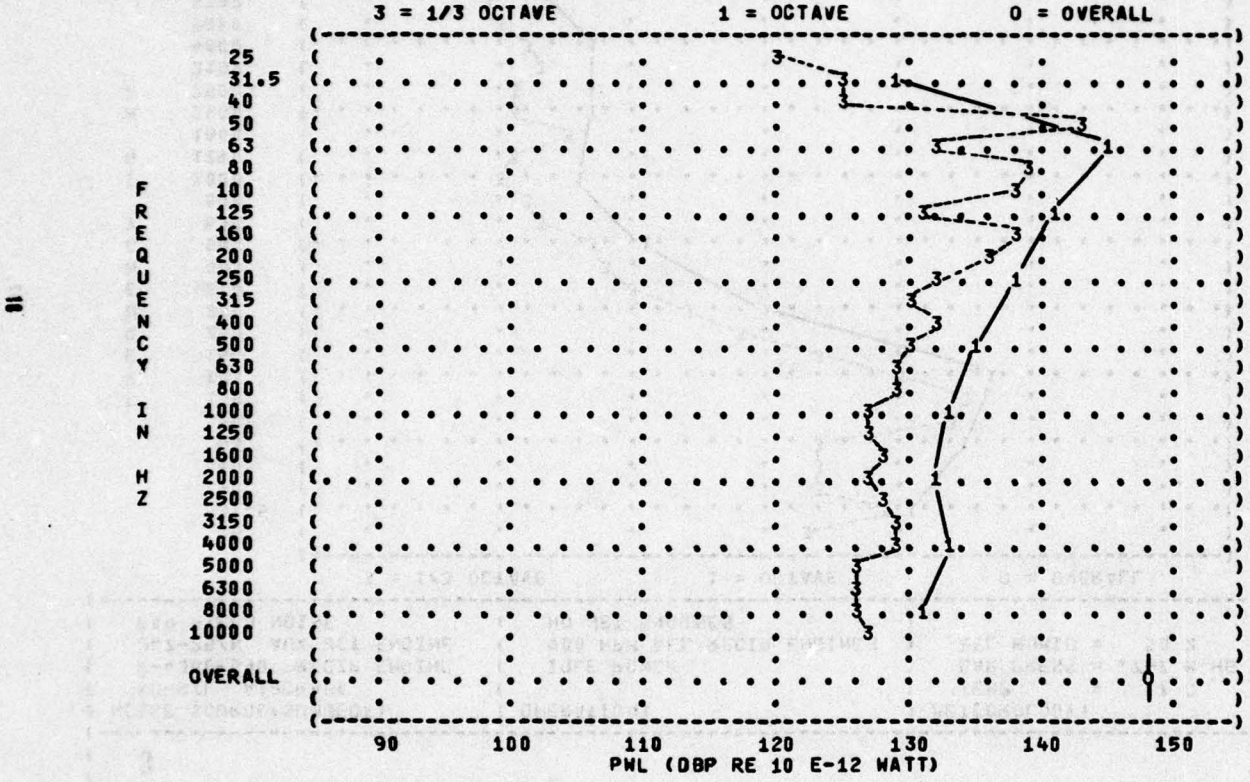
FIGURE: 3 ACOUSTIC POWER LEVEL (PWL)

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
POWER CHECK
2050 RPM ALL RECIP ENGS
NO JET ENGINES

METEOROLOGY:
TEMP = 17 C
BAR PRESS = .767 M HG
REL HUMID = 50 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 02
11 AUG 76
PAGE 3




| | PWL 1/3 OCTAVE | PWL OCTAVE |
|---|---|---|
| 25 | 120.0 | |
| 31.5 | 125.3 | 128.9 |
| 40 | 125.3 | |
| 50 | 143.0 | |
| 63 | 132.0 | 144.7 |
| 80 | 139.1 | |
| 100 | 136.1 | |
| 125 | 130.6 | 141.4 |
| 160 | 138.0 | |
| 200 | 136.5 | |
| 250 | 131.6 | 138.4 |
| 315 | 130.4 | |
| 400 | 131.6 | |
| 500 | 130.1 | 135.2 |
| 630 | 129.1 | |
| 800 | 128.6 | |
| 1000 | 127.4 | 132.5 |
| 1250 | 127.1 | |
| 1600 | 127.6 | |
| 2000 | 127.3 | 132.4 |
| 2500 | 127.9 | |
| 3150 | 128.6 | |
| 4000 | 129.0 | 132.9 |
| 5000 | 126.4 | |
| 6300 | 125.7 | |
| 8000 | 125.7 | 130.8 |
| 10000 | 126.6 | |
| OVERALL | | 147.9 |

FIGURE: ACOUSTIC POWER LEVEL (PWL)

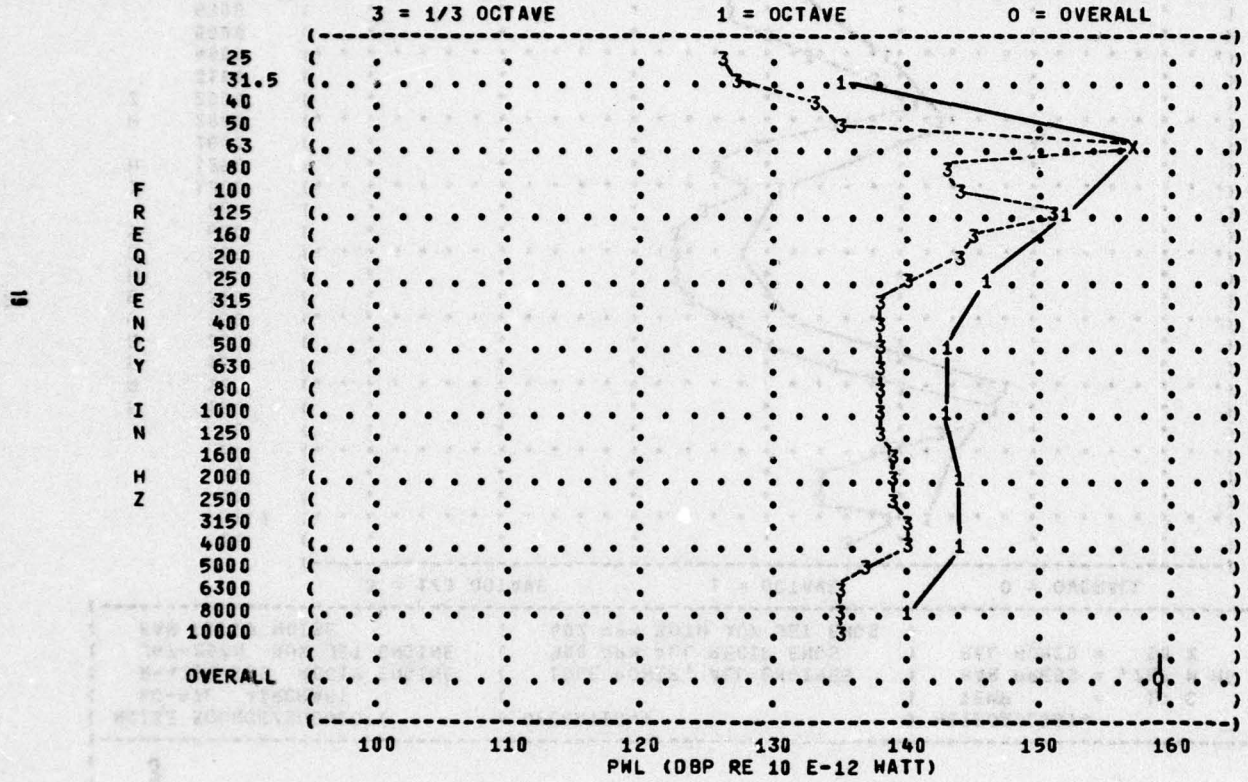
3

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM RECIP POWER
2650 RPM ALL RECIP ENGS
NO JET ENGINES

METEOROLOGY:
TEMP = 17 C
BAR PRESS = .767 M HG
REL HUMID = 50 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 03
11 AUG 76
PAGE 3




| | PWL 1/3 OCTAVE | PWL OCTAVE |
|---|---|---|
| 25 | 126.0 | |
| 31.5 | 127.4 | 135.0 |
| 40 | 133.5 | |
| 50 | 134.9 | |
| 63 | 156.8 | 157.0 |
| 80 | 143.3 | |
| 100 | 143.9 | |
| 125 | 150.7 | 152.4 |
| 160 | 145.8 | |
| 200 | 144.4 | |
| 250 | 139.9 | 146.4 |
| 315 | 138.1 | |
| 400 | 137.9 | |
| 500 | 138.2 | 142.7 |
| 630 | 137.6 | |
| 800 | 138.1 | |
| 1000 | 137.8 | 142.8 |
| 1250 | 138.1 | |
| 1600 | 138.8 | |
| 2000 | 136.8 | 143.8 |
| 2500 | 139.4 | |
| 3150 | 139.7 | |
| 4000 | 139.6 | 143.6 |
| 5000 | 136.5 | |
| 6300 | 135.1 | |
| 8000 | 134.9 | 139.7 |
| 10000 | 134.9 | |
| OVERALL | | 159.1 |

FIGURE: ACOUSTIC POWER LEVEL (PWL)

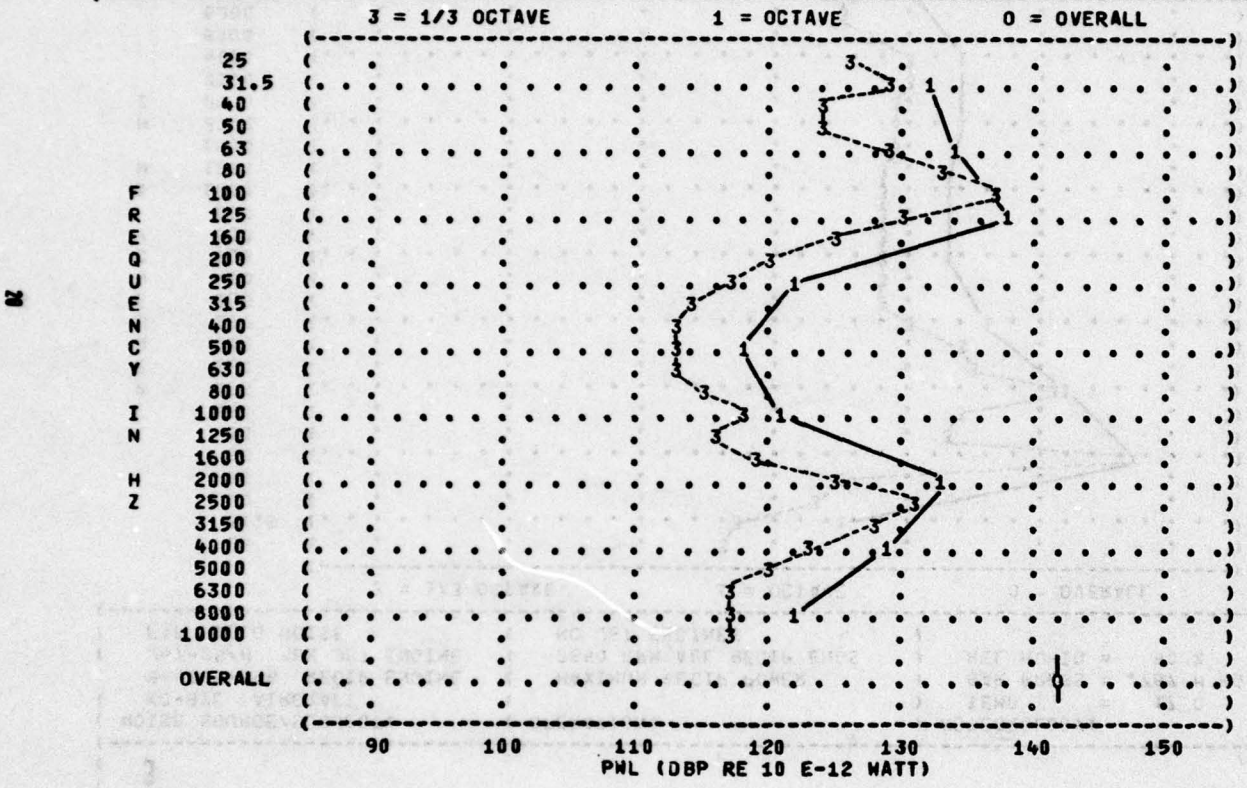
3

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER, ALL ENGINES
900 RPM ALL RECIP ENGS
40% RPM BOTH AUX JET ENGS

METEOROLOGY:
TEMP = 17 C
BAR PRESS = .767 M HG
REL HUMID = 50 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-082-016
RUN 04
11 AUG 76
PAGE 3




| | PWL 1/3 OCTAVE | PWL OCTAVE |
|---|---|---|
| 25 | 125.6 | |
| 31.5 | 129.2 | 131.7 |
| 40 | 124.4 | |
| 50 | 124.3 | |
| 63 | 128.6 | 134.5 |
| 80 | 132.6 | |
| 100 | 137.3 | |
| 125 | 129.6 | 138.3 |
| 160 | 125.4 | |
| 200 | 119.9 | |
| 250 | 117.1 | 122.4 |
| 315 | 114.0 | |
| 400 | 113.4 | |
| 500 | 112.7 | 117.9 |
| 630 | 113.2 | |
| 800 | 115.5 | |
| 1000 | 117.6 | 121.4 |
| 1250 | 116.4 | |
| 1600 | 118.7 | |
| 2000 | 125.4 | 132.6 |
| 2500 | 131.5 | |
| 3150 | 127.7 | |
| 4000 | 123.1 | 129.5 |
| 5000 | 119.8 | |
| 6300 | 117.0 | |
| 8000 | 116.8 | 121.5 |
| 10000 | 116.5 | |
| OVERALL | | 141.5 |

FIGURE: ACOUSTIC POWER LEVEL (PWL)

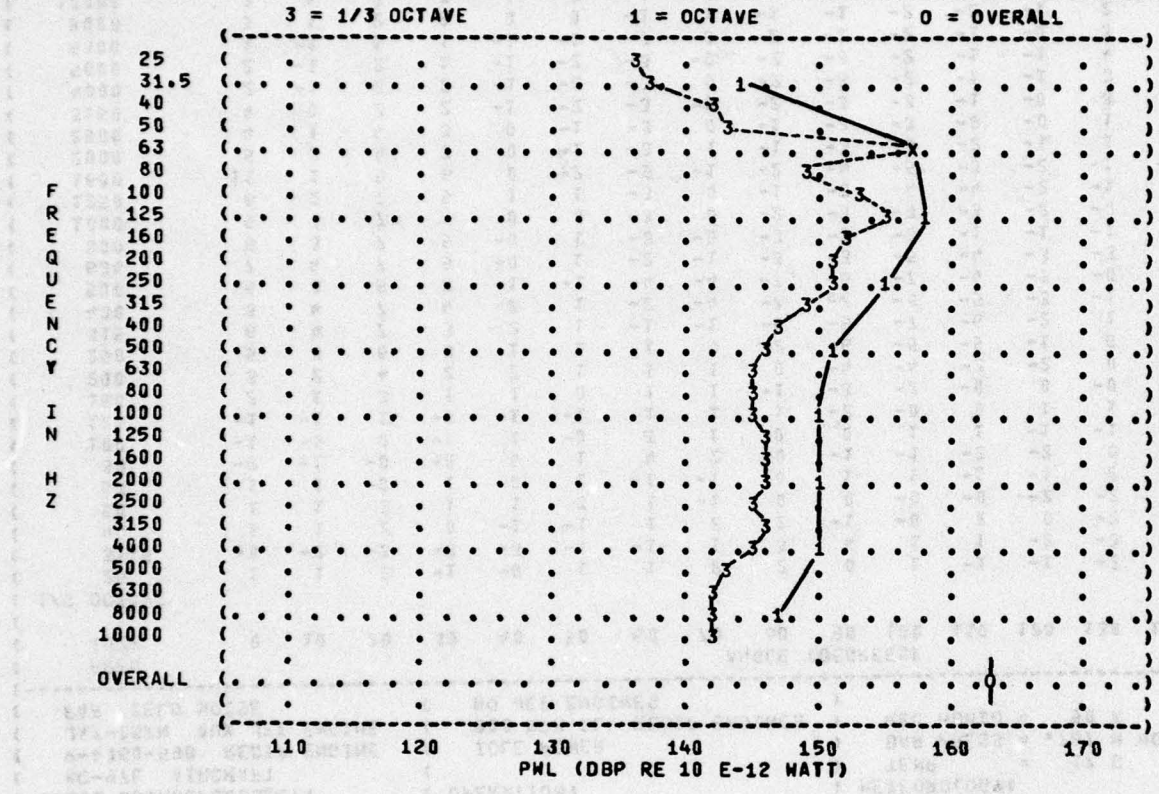
3

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER, ALL ENGS
2650 RPM ALL RECIP ENGS
100% RPM BOTH AUX JET ENG

METEOROLOGY:
TEMP = 17 C
BAR PRESS = .767 M HG
REL HUMID = 50 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 05
11 AUG 76
PAGE 3




| | PWL | |
|---|---|---|
| | 1/3 OCTAVE | OCTAVE |
| 25 | 136.1 | |
| 31.5 | 137.2 | 143.9 |
| 40 | 141.8 | |
| 50 | 142.9 | |
| 63 | 156.5 | 157.5 |
| 80 | 149.3 | |
| 100 | 152.7 | |
| 125 | 154.5 | 158.1 |
| 160 | 152.5 | |
| 200 | 150.8 | |
| 250 | 150.8 | 155.0 |
| 315 | 148.7 | |
| 400 | 147.0 | |
| 500 | 145.7 | 150.7 |
| 630 | 144.7 | |
| 800 | 145.2 | |
| 1000 | 145.3 | 150.1 |
| 1250 | 145.5 | |
| 1600 | 146.1 | |
| 2000 | 145.5 | 150.4 |
| 2500 | 145.4 | |
| 3150 | 145.7 | |
| 4000 | 145.2 | 149.5 |
| 5000 | 142.8 | |
| 6300 | 142.3 | |
| 8000 | 142.1 | 146.8 |
| 10000 | 141.8 | |
| OVERALL | | 163.0 |

TABLE: DIRECTIVITY INDEX (DB)

3

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER
900 RPM ALL RECIP ENGINES
NO JET ENGINES

METEOROLOGY:
TEMP = 17 C
BAR PRESS = .767 M HG
REL HUMID = 50 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 01
11 AUG 76
PAGE 4

| FREQ (HZ) | ANGLE (DEGREES) 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | 170 | 180 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1/3 OCTAVE | | | | | | | | | | | | | | | | | | | |
| 25 | 1 | 1 | 2 | -1 | -0 | 1 | 1 | 2 | 2 | 0 | 1 | -1 | -1 | -2 | -3 | -4 | -4 | | |
| 31.5 | -0 | -2 | -3 | -3 | -3 | -1 | -1 | 1 | 3 | 4 | 1 | 1 | -2 | -3 | -1 | -5 | -5 | | |
| 40 | 1 | 1 | 2 | 0 | -1 | -1 | 1 | 2 | 2 | -1 | -0 | 2 | 0 | -2 | -4 | -2 | -3 | | |
| 50 | 1 | 1 | 3 | 1 | 1 | 3 | 1 | -1 | 0 | 0 | -0 | -0 | -2 | -2 | 0 | -2 | -2 | | |
| 63 | 1 | 1 | -0 | 1 | 0 | 1 | -1 | -1 | 0 | 1 | 1 | -1 | -1 | 2 | -0 | -1 | -5 | | |
| 80 | -2 | -1 | -0 | -0 | 0 | 1 | 4 | 2 | -0 | -1 | -1 | -2 | -2 | 0 | -3 | -3 | -7 | | |
| 100 | -1 | -1 | 0 | -1 | 1 | -0 | 3 | 1 | -0 | 0 | 1 | 1 | -1 | -1 | -2 | -2 | -5 | | |
| 125 | -1 | -1 | 1 | -0 | -1 | -1 | 1 | 1 | 1 | -2 | -0 | 0 | 1 | 1 | 1 | -1 | -3 | | |
| 160 | 2 | 1 | 3 | 1 | 1 | 0 | 1 | 1 | -1 | -3 | -2 | -0 | 0 | -0 | -0 | 1 | -4 | | |
| 200 | 3 | 2 | 4 | 2 | 2 | 1 | 1 | 1 | 0 | -4 | -4 | -2 | -2 | 0 | 2 | 1 | -4 | | |
| 250 | 5 | 3 | 6 | 3 | 1 | 1 | 1 | 0 | -2 | -6 | -5 | -5 | -1 | 0 | 1 | 1 | -4 | | |
| 315 | 6 | 4 | 7 | 3 | 2 | 1 | -1 | -1 | -5 | -5 | -7 | -6 | -2 | 1 | 2 | 3 | -1 | | |
| 400 | 8 | 4 | 7 | 4 | 2 | 1 | -2 | -4 | -7 | -7 | -8 | -5 | -3 | -1 | 2 | 5 | -0 | | |
| 500 | 6 | 3 | 5 | 3 | -1 | -1 | -4 | -4 | -7 | -6 | -7 | -4 | -3 | -0 | 4 | 7 | 1 | | |
| 630 | 7 | 4 | 7 | 5 | -0 | 1 | -2 | -1 | -3 | -3 | -5 | -4 | -3 | -3 | 0 | 4 | -3 | | |
| 800 | 5 | 3 | 7 | 5 | -0 | 1 | -3 | -0 | -3 | -2 | -3 | -1 | -1 | -1 | 0 | 3 | -3 | | |
| 1000 | 5 | 3 | 7 | 4 | 0 | 0 | -3 | 0 | -2 | -3 | -3 | -3 | -2 | -0 | 1 | 2 | -3 | | |
| 1250 | 6 | 2 | 7 | 5 | 1 | 1 | -3 | 0 | -1 | -3 | -4 | -4 | -2 | -1 | 0 | 0 | -4 | | |
| 1600 | 11 | 1 | 9 | 6 | 0 | -2 | -5 | -1 | -2 | -4 | -5 | -3 | -2 | -1 | -1 | -2 | -7 | | |
| 2000 | 5 | 2 | 4 | 3 | 0 | -1 | -3 | 1 | -1 | -3 | -3 | -2 | -1 | 1 | 2 | 3 | -2 | | |
| 2500 | 4 | 1 | 4 | 3 | 0 | -1 | -3 | 0 | -1 | -3 | -3 | -2 | -0 | 1 | 3 | 2 | -4 | | |
| 3150 | 4 | 0 | 3 | 2 | -1 | -2 | -3 | -0 | -2 | -3 | -3 | -1 | -0 | 3 | 4 | 2 | -4 | | |
| 4000 | 2 | -1 | 2 | 2 | -1 | -2 | -3 | 0 | -2 | -3 | -2 | -1 | -1 | 3 | 4 | 2 | -5 | | |
| 5000 | 2 | -1 | 2 | 1 | -1 | -2 | -3 | -0 | -2 | -3 | -2 | -1 | -1 | 4 | 5 | 2 | -5 | | |
| 6300 | 1 | -1 | 1 | 1 | -1 | -1 | -2 | -0 | -2 | -2 | -2 | -1 | -0 | 3 | 5 | 3 | -4 | | |
| 8000 | 3 | 1 | 2 | 2 | 0 | 0 | -1 | 1 | -1 | -1 | -2 | -2 | -1 | 2 | 3 | 1 | -5 | | |
| 10000 | 2 | 1 | 3 | 3 | 1 | 2 | 1 | 2 | 1 | -2 | -3 | -3 | -2 | -2 | 0 | -1 | -4 | | |
| OCTAVE | | | | | | | | | | | | | | | | | | | |
| 31.5 | 0 | -1 | -1 | -2 | -2 | -1 | -1 | 1 | 3 | 3 | 1 | 1 | -1 | -3 | -2 | -4 | -4 | | |
| 63 | -1 | -1 | 0 | 0 | 0 | 1 | 3 | 2 | 0 | -1 | -0 | -2 | -2 | 0 | -2 | -3 | -6 | | |
| 125 | -1 | -1 | 1 | -1 | 0 | -0 | 2 | 1 | -0 | -0 | 1 | 1 | -0 | -0 | -1 | -2 | -4 | | |
| 250 | 4 | 3 | 5 | 2 | 2 | 1 | 1 | 0 | -1 | -4 | -4 | -3 | -2 | 0 | 2 | 1 | -4 | | |
| 500 | 7 | 4 | 6 | 4 | 1 | 1 | -3 | -3 | -6 | -6 | -7 | -5 | -3 | -1 | 3 | 6 | 0 | | |
| 1000 | 5 | 3 | 7 | 5 | 0 | 1 | -3 | 0 | -2 | -3 | -3 | -2 | -2 | -1 | 0 | 2 | -4 | | |
| 2000 | 9 | 2 | 7 | 5 | 0 | -1 | -4 | -0 | -1 | -3 | -4 | -3 | -1 | 0 | 1 | 1 | -5 | | |
| 4000 | 3 | -0 | 3 | 2 | -1 | -2 | -3 | -0 | -2 | -3 | -2 | -1 | -0 | 3 | 4 | 2 | -5 | | |
| 8000 | 2 | -0 | 1 | 2 | -0 | -0 | -1 | 0 | -1 | -2 | -2 | -2 | -1 | 2 | 4 | 2 | -4 | | |
| OVERALL | -1 | -1 | 0 | -0 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | -0 | -1 | -0 | -1 | -2 | -5 | | |

TABLE: 3 DIRECTIVITY INDEX (DB)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 02
11 AUG 76
PAGE 4

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
POWER CHECK
2050 RPM ALL RECIP ENGS
NO JET ENGINES

METEOROLOGY:
TEMP = 17 C
BAR PRESS = .767 M HG
REL HUMID = 50 %

| FREQ (HZ) | ANGLE (DEGREES) 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | 170 | 180 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1/3 OCTAVE | | | | | | | | | | | | | | | | | | | |
| 25 | 3 | 3 | 1 | 1 | 3 | 2 | 1 | 0 | 3 | 0 | -1 | -3 | -3 | -4 | -3 | -4 | | | |
| 31.5 | -2 | -3 | -4 | -4 | -4 | -3 | -1 | 1 | 1 | 2 | 1 | 2 | 0 | -0 | 2 | -1 | | | |
| 40 | -2 | -1 | 0 | -1 | -0 | -2 | -2 | -0 | 1 | 1 | 1 | 2 | 1 | -1 | -1 | -4 | | | |
| 50 | -5 | -3 | -4 | -3 | -2 | -3 | -3 | -2 | 2 | 1 | 3 | 2 | 2 | -1 | -2 | -8 | | | |
| 63 | -5 | -2 | -3 | 4 | -2 | -2 | -2 | -3 | -1 | 1 | 2 | 1 | 2 | 0 | 0 | -5 | | | |
| 80 | -7 | -4 | -2 | -1 | -0 | -2 | 3 | -0 | 0 | 3 | 1 | 1 | 1 | -0 | -5 | -7 | | | |
| 100 | 2 | 3 | 2 | 2 | 2 | -1 | 1 | 0 | -3 | 1 | 1 | 0 | 0 | -1 | -5 | -4 | | | |
| 125 | 2 | 3 | 2 | 5 | 1 | -0 | -0 | -1 | -1 | -4 | -1 | -0 | -1 | -1 | 2 | -5 | | | |
| 160 | 1 | 3 | 5 | 1 | 0 | 1 | 2 | -0 | -0 | -5 | -0 | 1 | -1 | 0 | -2 | -6 | | | |
| 200 | 5 | 5 | 4 | 2 | 2 | -1 | 2 | 0 | -2 | -3 | -0 | -0 | -0 | -1 | -0 | -5 | | | |
| 250 | 7 | 8 | 8 | 6 | 2 | 1 | 2 | -2 | -3 | -8 | -7 | -6 | -4 | -3 | -2 | -7 | | | |
| 315 | 6 | 9 | 7 | 4 | 3 | 4 | 2 | -4 | -4 | -8 | -9 | -7 | -2 | -2 | -2 | -8 | | | |
| 400 | 6 | 9 | 7 | 6 | 4 | 4 | -0 | -4 | -7 | -8 | -10 | -9 | -4 | -3 | -3 | -7 | | | |
| 500 | 5 | 8 | 5 | 7 | 4 | 2 | 0 | -3 | -4 | -4 | -6 | -5 | -3 | -2 | -3 | -6 | | | |
| 630 | 4 | 7 | 5 | 7 | 2 | 0 | 2 | -2 | -3 | -3 | -5 | -4 | -3 | -1 | -3 | -5 | | | |
| 800 | 3 | 5 | 5 | 5 | 2 | 1 | 2 | 0 | -0 | -3 | -4 | -4 | -3 | -0 | -2 | -4 | | | |
| 1000 | 2 | 3 | 5 | 4 | 2 | 1 | 1 | 1 | 1 | -3 | -4 | -3 | -2 | 0 | -2 | -5 | | | |
| 1250 | 2 | 3 | 3 | 3 | 2 | 1 | 1 | 1 | 2 | -3 | -3 | -2 | -1 | -1 | -3 | -7 | | | |
| 1600 | 1 | 3 | 3 | 3 | 2 | 1 | 2 | 2 | 3 | -3 | -3 | -2 | -2 | -2 | -4 | -8 | | | |
| 2000 | 0 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | -2 | -3 | -3 | -3 | -2 | -5 | -8 | | | |
| 2500 | -1 | 1 | 2 | 2 | 2 | 3 | 3 | 2 | 3 | -2 | -2 | -2 | -2 | -3 | -6 | -10 | | | |
| 3150 | -1 | -0 | 1 | 2 | 2 | 3 | 2 | 2 | 2 | -1 | -2 | -2 | -2 | -3 | -6 | -10 | | | |
| 4000 | -1 | 0 | 2 | 3 | 3 | 4 | 3 | 2 | 2 | -2 | -4 | -4 | -4 | -5 | -8 | -10 | | | |
| 5000 | -1 | 1 | 2 | 3 | 4 | 3 | 3 | 2 | 1 | -2 | -5 | -5 | -5 | -6 | -8 | -10 | | | |
| 6300 | -1 | 0 | 2 | 3 | 4 | 3 | 3 | 2 | 2 | -1 | -5 | -5 | -5 | -6 | -8 | -9 | | | |
| 8000 | -1 | 1 | 2 | 3 | 4 | 4 | 3 | 3 | 1 | -3 | -6 | -6 | -6 | -7 | -9 | -11 | | | |
| 10000 | -1 | 1 | 3 | 4 | 3 | 4 | 3 | 3 | 2 | -5 | -8 | -10 | -10 | -11 | -12 | -14 | | | |
| OCTAVE | | | | | | | | | | | | | | | | | | | |
| 31.5 | -1 | -1 | -1 | -2 | -1 | -1 | -1 | 0 | 1 | 1 | 1 | 2 | 1 | -1 | 1 | -3 | | | |
| 63 | -5 | -3 | -3 | -1 | -1 | -2 | -0 | -1 | 1 | 2 | 3 | 2 | 2 | -1 | -2 | -7 | | | |
| 125 | 2 | 3 | 4 | 2 | 1 | 0 | 1 | -0 | -1 | -1 | 1 | 1 | -0 | -0 | -2 | -5 | | | |
| 250 | 6 | 7 | 6 | 3 | 2 | 1 | 2 | -0 | -2 | -5 | -2 | -2 | -1 | -2 | -1 | -6 | | | |
| 500 | 5 | 8 | 6 | 7 | 3 | 3 | 0 | -3 | -5 | -5 | -7 | -6 | -4 | -2 | -3 | -6 | | | |
| 1000 | 2 | 4 | 5 | 4 | 2 | 1 | 1 | 1 | 1 | -3 | -4 | -3 | -2 | -0 | -2 | -5 | | | |
| 2000 | 0 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | -2 | -3 | -2 | -2 | -2 | -5 | -8 | | | |
| 4000 | -1 | 0 | 2 | 2 | 3 | 3 | 3 | 2 | 2 | -2 | -3 | -3 | -3 | -4 | -7 | -10 | | | |
| 8000 | -1 | 0 | 2 | 3 | 4 | 4 | 3 | 3 | 2 | -2 | -6 | -6 | -6 | -7 | -9 | -11 | | | |
| OVERALL | 1 | 3 | 2 | 1 | 1 | -0 | 1 | -1 | 0 | 0 | 1 | 1 | 1 | -1 | -2 | -6 | | | |

TABLE: DIRECTIVITY INDEX (DB)

3

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 03
11 AUG 76
PAGE 4

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM RECIP POWER
2650 RPM ALL RECIP ENGS
NO JET ENGINES

METEOROLOGY:
TEMP = 17 C
BAR PRESS = .767 M HG
REL HUMID = 50 %

| FREQ (HZ) | ANGLE (DEGREES) 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | 170 | 180 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1/3 OCTAVE | | | | | | | | | | | | | | | | | | | |
| 25 | -1 | -1 | -1 | -1 | -3 | -1 | -1 | 2 | 1 | 1 | 1 | 0 | 1 | -1 | 0 | -4 | | | |
| 31.5 | 1 | 1 | 2 | 0 | 1 | -2 | 2 | 1 | 2 | 1 | 0 | -0 | -2 | -1 | -1 | -3 | | | |
| 40 | -6 | -5 | -6 | -7 | -6 | -3 | -3 | -3 | 0 | -3 | -3 | 0 | 5 | 3 | 4 | 4 | | | |
| 50 | -6 | -5 | -4 | -7 | -6 | -4 | -4 | -4 | 2 | 3 | 1 | 3 | 3 | 1 | -2 | -3 | | | |
| 63 | -11 | -7 | -6 | -10 | -9 | -8 | -10 | -6 | 2 | 5 | 2 | 3 | 2 | 1 | -5 | -7 | | | |
| 80 | -9 | -7 | -5 | -7 | -7 | -6 | -4 | -4 | 2 | 4 | 2 | 3 | 2 | 1 | -3 | -5 | | | |
| 100 | -6 | -6 | -5 | -7 | -6 | -7 | -4 | -2 | -3 | -1 | 1 | 3 | 5 | 3 | 1 | -2 | | | |
| 125 | -5 | -3 | -0 | -2 | -3 | -5 | -7 | 1 | 3 | 4 | 4 | -2 | -2 | -3 | -7 | -9 | | | |
| 160 | -3 | -4 | -2 | -4 | -6 | -3 | -4 | -1 | -1 | -1 | 1 | 1 | 5 | 3 | 1 | -4 | | | |
| 200 | 3 | 5 | 3 | -1 | -4 | -4 | -3 | -2 | 3 | 4 | 0 | -3 | 1 | -1 | -3 | -12 | | | |
| 250 | 7 | 4 | 6 | 3 | 0 | -1 | -1 | -3 | -2 | -1 | 1 | -0 | -1 | 1 | -2 | -7 | | | |
| 315 | 7 | 6 | 6 | 1 | 2 | 0 | -1 | -5 | -3 | 1 | 2 | 0 | -3 | -3 | -3 | -7 | | | |
| 400 | 9 | 6 | 5 | 4 | 4 | 3 | -1 | -4 | -2 | 1 | -1 | -1 | -6 | -3 | -2 | -5 | | | |
| 500 | 6 | 5 | 4 | 4 | 2 | -1 | -0 | -1 | 1 | 0 | -1 | -1 | -4 | -2 | -2 | -4 | | | |
| 630 | 5 | 3 | 4 | 4 | 1 | -2 | 2 | 1 | 2 | -0 | -2 | -2 | -3 | -1 | -2 | -4 | | | |
| 800 | 3 | 1 | 2 | 1 | 1 | -1 | 2 | 3 | 2 | -0 | -2 | -2 | -4 | -1 | -1 | -4 | | | |
| 1000 | 2 | 0 | 1 | 0 | 1 | -1 | 2 | 3 | 3 | -0 | -1 | -2 | -3 | -2 | -2 | -6 | | | |
| 1250 | 0 | -1 | 0 | 0 | -0 | 0 | 3 | 3 | 3 | 0 | -1 | -2 | -2 | -2 | -3 | -7 | | | |
| 1600 | 0 | -1 | 0 | 1 | 1 | 1 | 2 | 3 | 3 | -0 | -2 | -1 | -2 | -3 | -4 | -7 | | | |
| 2000 | -0 | -1 | 0 | 1 | 1 | 2 | 2 | 3 | 2 | -0 | -1 | -1 | -2 | -3 | -4 | -7 | | | |
| 2500 | -0 | -1 | 0 | 1 | 1 | 2 | 2 | 3 | 2 | 1 | -1 | -1 | -2 | -3 | -4 | -7 | | | |
| 3150 | -1 | -2 | -0 | 0 | 1 | 1 | 2 | 2 | 2 | 1 | -1 | -1 | -2 | -2 | -4 | -6 | | | |
| 4000 | -1 | -1 | 1 | 1 | 2 | 2 | 3 | 2 | 1 | -0 | -1 | -2 | -3 | -4 | -5 | -7 | | | |
| 5000 | -0 | -1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | -2 | -2 | -2 | -3 | -4 | -7 | | | |
| 6300 | -0 | -1 | 1 | 1 | 2 | 2 | 2 | 2 | 1 | 1 | -2 | -2 | -2 | -3 | -4 | -6 | | | |
| 8000 | -1 | -1 | 2 | 2 | 2 | 3 | 2 | 2 | 1 | 0 | -3 | -3 | -3 | -4 | -5 | -7 | | | |
| 10000 | 1 | -1 | 2 | 3 | 3 | 3 | 3 | 3 | 2 | -3 | -6 | -6 | -6 | -7 | -8 | -10 | | | |
| OCTAVE | | | | | | | | | | | | | | | | | | | |
| 31.5 | -3 | -3 | -3 | -3 | -3 | -3 | -1 | -1 | 1 | -1 | -2 | 0 | 4 | 2 | 3 | 2 | | | |
| 63 | -10 | -7 | -5 | -9 | -8 | -8 | -9 | -6 | 2 | 5 | 2 | 3 | 2 | 1 | -4 | -7 | | | |
| 125 | -5 | -4 | -1 | -3 | -4 | -5 | -6 | -0 | 2 | 3 | 3 | -0 | 2 | -0 | -3 | -6 | | | |
| 250 | 5 | 5 | 5 | 1 | -1 | -2 | -2 | -2 | 2 | 3 | 1 | -2 | -0 | -1 | -3 | -9 | | | |
| 500 | 7 | 5 | 4 | 4 | 3 | 0 | 0 | -1 | 1 | 1 | -1 | -1 | -4 | -2 | -2 | -5 | | | |
| 1000 | 2 | 0 | 2 | 1 | 1 | -0 | 2 | 3 | 2 | -0 | -2 | -2 | -3 | -2 | -2 | -5 | | | |
| 2000 | -0 | -1 | 0 | 1 | 1 | 1 | 2 | 3 | 2 | 0 | -2 | -1 | -2 | -3 | -4 | -7 | | | |
| 4000 | -1 | -1 | 0 | 1 | 1 | 2 | 2 | 2 | 2 | 0 | -1 | -1 | -2 | -3 | -4 | -6 | | | |
| 8000 | -0 | -1 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 0 | -2 | -3 | -3 | -4 | -5 | -7 | | | |
| OVERALL | -3 | -3 | -2 | -4 | -5 | -5 | -5 | -2 | 2 | 4 | 2 | 2 | 2 | 0 | -4 | -6 | | | |

TABLE: DIRECTIVITY INDEX (DB)

3

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER, ALL ENGINES
900 RPM ALL RECIP ENGS
40% RPM BOTH AUX JET ENGS

METEOROLOGY:
TEMP = 17 C
BAR PRESS = .767 M HG
REL HUMID = 50 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 04
11 AUG 76
PAGE 4

| FREQ (HZ) | ANGLE (DEGREES) 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | 170 | 180 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1/3 OCTAVE | | | | | | | | | | | | | | | | | | | |
| 25 | -0 | 2 | 1 | -1 | 2 | -0 | 0 | -1 | 1 | 4 | -1 | -2 | -4 | -1 | -4 | -1 | -5 | | |
| 31.5 | -1 | 0 | -1 | -2 | -2 | -3 | -1 | 0 | 3 | 3 | 2 | 1 | -2 | -3 | -3 | -6 | -7 | | |
| 40 | 1 | 1 | -0 | -2 | -2 | -2 | 1 | 2 | 3 | 1 | 0 | 1 | -1 | -2 | -2 | -4 | -5 | | |
| 50 | 1 | 1 | 1 | -0 | -0 | 2 | 1 | -1 | 2 | 1 | -1 | -0 | -2 | -1 | -1 | -4 | -7 | | |
| 63 | -5 | -1 | -4 | -4 | -3 | -2 | 5 | -1 | 0 | -2 | -1 | -4 | 5 | -2 | -6 | -7 | -13 | | |
| 80 | -2 | -0 | 1 | 1 | 1 | -0 | 2 | 1 | -0 | 3 | 1 | -1 | 0 | -3 | -4 | -7 | -11 | | |
| 100 | -2 | -0 | 2 | 2 | 1 | 0 | 2 | 1 | -2 | -1 | 0 | -1 | 1 | -0 | -4 | -5 | -8 | | |
| 125 | -1 | 1 | 1 | 1 | -1 | -0 | 0 | 1 | 1 | -1 | -0 | -0 | 1 | 1 | -1 | -3 | -6 | | |
| 160 | 1 | 3 | 3 | 2 | 1 | 1 | 0 | 2 | 1 | -2 | -2 | -0 | -1 | -2 | -2 | -2 | -7 | | |
| 200 | 3 | 5 | 3 | 2 | 1 | -0 | 1 | 1 | 1 | -2 | -2 | -2 | 0 | 0 | -1 | -1 | -6 | | |
| 250 | 5 | 6 | 6 | 3 | -1 | -0 | -1 | 0 | 0 | -2 | -3 | -3 | -1 | 1 | -1 | -1 | -5 | | |
| 315 | 5 | 7 | 6 | 3 | 0 | 1 | -0 | -1 | -2 | -3 | -3 | -5 | -2 | 2 | 1 | 1 | -4 | | |
| 400 | 7 | 7 | 8 | 3 | 1 | 1 | -1 | -2 | -4 | -4 | -4 | -5 | -2 | -0 | -0 | 0 | -4 | | |
| 500 | 6 | 6 | 8 | 4 | 1 | 1 | 0 | -3 | -2 | -3 | -4 | -3 | -2 | -2 | 1 | -0 | -6 | | |
| 630 | 6 | 5 | 9 | 4 | 1 | 1 | 1 | -2 | -1 | -3 | -2 | -2 | -3 | -5 | -5 | -5 | -11 | | |
| 800 | 7 | 6 | 10 | 4 | 1 | 0 | -0 | -4 | -3 | -5 | -2 | -2 | -2 | -6 | -7 | -8 | -14 | | |
| 1000 | 6 | 5 | 10 | 3 | 1 | -1 | -2 | -1 | -3 | -7 | 2 | 1 | -6 | -8 | -10 | -11 | -17 | | |
| 1250 | 6 | 5 | 11 | 4 | 2 | 1 | 0 | -2 | -2 | -5 | -2 | -2 | -5 | -8 | -9 | -11 | -17 | | |
| 1600 | 6 | 6 | 11 | 4 | 1 | 0 | 0 | -3 | -3 | -6 | -4 | -5 | -8 | -10 | -11 | -13 | -19 | | |
| 2000 | 2 | 2 | 9 | 2 | 4 | 4 | 2 | 2 | -1 | -4 | -8 | -9 | -11 | -12 | -13 | -16 | -23 | | |
| 2500 | 1 | 2 | 9 | 2 | 4 | 4 | 3 | -1 | -1 | -6 | -13 | -13 | -15 | -16 | -16 | -19 | -25 | | |
| 3150 | 2 | 2 | 10 | 4 | 7 | -0 | 0 | -3 | -4 | -9 | -12 | -10 | -13 | -14 | -13 | -16 | -21 | | |
| 4000 | 4 | 4 | 9 | 2 | 5 | 4 | 0 | -1 | -2 | -4 | -7 | -4 | -10 | -11 | -12 | -15 | -21 | | |
| 5000 | 3 | 4 | 9 | 2 | 6 | 3 | 1 | -1 | -2 | -6 | -9 | -4 | -9 | -10 | -12 | -15 | -21 | | |
| 6300 | 4 | 3 | 9 | 3 | 4 | 3 | 3 | 1 | 0 | -6 | -9 | -5 | -10 | -11 | -12 | -15 | -20 | | |
| 8000 | 4 | 4 | 9 | 3 | 5 | 4 | 3 | -0 | -1 | -8 | -12 | -9 | -12 | -14 | -14 | -17 | -24 | | |
| 10000 | 5 | 4 | 8 | 3 | 5 | 3 | 3 | 1 | 0 | -7 | -15 | -12 | -15 | -17 | -17 | -20 | | | |
| OCTAVE | | | | | | | | | | | | | | | | | | | |
| 31.5 | -1 | 1 | -0 | -2 | -1 | -2 | -1 | 0 | 3 | 3 | 1 | 0 | -2 | -2 | -3 | -4 | -6 | | |
| 63 | -2 | -0 | -0 | -0 | -0 | -1 | 3 | 1 | -0 | 2 | 0 | -1 | 2 | -2 | -4 | -7 | -11 | | |
| 125 | -2 | 0 | 2 | 2 | 1 | 0 | 2 | 1 | -1 | -1 | 0 | -0 | 1 | 0 | -3 | -5 | -8 | | |
| 250 | 4 | 6 | 5 | 3 | 0 | 0 | 0 | 0 | 0 | -2 | -3 | -2 | -0 | 1 | -1 | -1 | -6 | | |
| 500 | 6 | 6 | 8 | 4 | 1 | 1 | 0 | -3 | -2 | -3 | -4 | -3 | -2 | -2 | -1 | -1 | -6 | | |
| 1000 | 6 | 5 | 10 | 4 | 1 | -0 | -1 | -2 | -3 | -6 | 0 | -0 | -4 | -7 | -9 | -10 | -16 | | |
| 2000 | 2 | 3 | 9 | 2 | 4 | 4 | 3 | -0 | -1 | -5 | -11 | -11 | -13 | -14 | -15 | -18 | -24 | | |
| 4000 | 3 | 3 | 10 | 4 | 7 | 2 | 0 | -2 | -4 | -7 | -10 | -7 | -11 | -13 | -13 | -15 | -21 | | |
| 8000 | 4 | 4 | 9 | 3 | 4 | 3 | 3 | 0 | -0 | -7 | -10 | -7 | -11 | -12 | -13 | -16 | -22 | | |
| OVERALL | -0 | 1 | 4 | 1 | 1 | 1 | 2 | 0 | -0 | 0 | -0 | -1 | 0 | -1 | -4 | -5 | -9 | | |

TABLE: DIRECTIVITY INDEX (DB)

3

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER, ALL ENGS
2650 RPM ALL RECIP ENGS
100% RPM BOTH AUX JET ENG

METEOROLOGY:
TEMP = 17 C
BAR PRESS = .767 M HG
REL HUMID = 50 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 05
11 AUG 76
PAGE 4

| FREQ (HZ) | ANGLE (DEGREES) 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | 170 | 180 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1/3 OCTAVE | | | | | | | | | | | | | | | | | | | |
| 25 | -7 | -8 | -8 | -9 | -7 | -7 | -6 | -6 | -5 | -5 | -4 | -2 | -0 | 5 | 7 | 7 | | | |
| 31.5 | -6 | -8 | -9 | -8 | -8 | -7 | -6 | -7 | -4 | -5 | -4 | -3 | 1 | 5 | 7 | 7 | | | |
| 40 | -12 | -10 | -11 | -11 | -10 | -9 | -9 | -8 | -8 | -5 | -4 | -2 | 2 | 5 | 8 | 6 | | | |
| 50 | -9 | -9 | -10 | -11 | -10 | -11 | -9 | -9 | -7 | -4 | -2 | -1 | 2 | 4 | 8 | 5 | | | |
| 63 | -2 | -5 | -8 | -9 | -5 | -10 | -8 | -6 | -2 | 3 | 7 | 3 | 1 | -2 | -1 | -8 | | | |
| 80 | -8 | -10 | -12 | -13 | -10 | -11 | -9 | -10 | -8 | -5 | 0 | -2 | 0 | 7 | 8 | 0 | | | |
| 100 | -13 | -12 | -13 | -14 | -14 | -14 | -12 | -10 | -8 | -6 | -4 | -4 | 0 | 8 | 8 | -4 | | | |
| 125 | -5 | -4 | -3 | -6 | -4 | -9 | -11 | -5 | -4 | 0 | 2 | -2 | -0 | 6 | 7 | -5 | | | |
| 160 | -10 | -9 | -8 | -11 | -11 | -10 | -10 | -9 | -8 | -7 | -4 | -2 | 3 | 6 | 9 | -5 | | | |
| 200 | 1 | -0 | -2 | -6 | -7 | -8 | -9 | -9 | -8 | -4 | -2 | -1 | 3 | 5 | 8 | -5 | | | |
| 250 | 1 | -2 | -3 | -6 | -9 | -9 | -10 | -9 | -10 | -8 | -6 | -4 | 3 | 8 | 8 | -7 | | | |
| 315 | -1 | -3 | -2 | -7 | -8 | -9 | -9 | -9 | -9 | -7 | -6 | -2 | 4 | 7 | 7 | -7 | | | |
| 400 | 1 | 1 | -1 | -4 | -5 | -5 | -8 | -8 | -6 | -6 | -6 | 0 | 3 | 6 | 7 | -7 | | | |
| 500 | 0 | -0 | -1 | -2 | -5 | -6 | -8 | -5 | -4 | -5 | -4 | 1 | 4 | 7 | 4 | -7 | | | |
| 630 | -1 | -2 | -1 | -3 | -5 | -6 | -7 | -3 | -2 | -4 | -1 | 3 | 4 | 6 | 2 | -6 | | | |
| 800 | -2 | -3 | -2 | -5 | -6 | -6 | -6 | -3 | -2 | -2 | 0 | 3 | 4 | 5 | 2 | -7 | | | |
| 1000 | -3 | -4 | -4 | -6 | -7 | -6 | -5 | -2 | -3 | -2 | 1 | 4 | 4 | 5 | 2 | -8 | | | |
| 1250 | -5 | -5 | -5 | -7 | -7 | -6 | -5 | -2 | -3 | -2 | 1 | 4 | 5 | 4 | 0 | -10 | | | |
| 1600 | -4 | -5 | -5 | -6 | -7 | -4 | -4 | -2 | -2 | -1 | 1 | 4 | 5 | 4 | -1 | -11 | | | |
| 2000 | -4 | -4 | -4 | -5 | -6 | -4 | -3 | -2 | -1 | 0 | 1 | 3 | 5 | 3 | -0 | -11 | | | |
| 2500 | -3 | -4 | -3 | -5 | -5 | -3 | -3 | -1 | -1 | 1 | 1 | 3 | 5 | 2 | 0 | -12 | | | |
| 3150 | -4 | -4 | -4 | -5 | -6 | -4 | -3 | -1 | -1 | 2 | 0 | 2 | 5 | 2 | -1 | -12 | | | |
| 4000 | -3 | -2 | -2 | -4 | -4 | -2 | -2 | -1 | -1 | 1 | 1 | 3 | 4 | 2 | -1 | -13 | | | |
| 5000 | -2 | -2 | -2 | -4 | -4 | -3 | -2 | -0 | -1 | 1 | 0 | 2 | 4 | 2 | -1 | -13 | | | |
| 6300 | -4 | -3 | -3 | -5 | -5 | -4 | -3 | -1 | -1 | 1 | 1 | 3 | 4 | 3 | -2 | -14 | | | |
| 8000 | -3 | -3 | -3 | -5 | -5 | -3 | -3 | -1 | -1 | 1 | 1 | 2 | 5 | 3 | -1 | -15 | | | |
| 10000 | -3 | -1 | -2 | -4 | -4 | -2 | -2 | 2 | -2 | 1 | 0 | 1 | 4 | 2 | -3 | -17 | | | |
| OCTAVE | | | | | | | | | | | | | | | | | | | |
| 31.5 | -9 | -9 | -10 | -10 | -9 | -8 | -8 | -8 | -7 | -5 | -4 | -2 | 1 | 5 | 7 | 6 | | | |
| 63 | -3 | -5 | -8 | -9 | -6 | -10 | -8 | -7 | -3 | 2 | 6 | 2 | 1 | 1 | 3 | -4 | | | |
| 125 | -8 | -7 | -6 | -9 | -7 | -10 | -11 | -7 | -6 | -2 | -1 | -3 | 1 | 6 | 8 | -3 | | | |
| 250 | 0 | -1 | -2 | -6 | -8 | -9 | -9 | -9 | -9 | -6 | -4 | -2 | 3 | 7 | 8 | -6 | | | |
| 500 | 0 | 0 | -1 | -3 | -5 | -6 | -8 | -5 | -4 | -5 | -3 | 1 | 4 | 6 | 5 | -7 | | | |
| 1000 | -3 | -4 | -4 | -6 | -7 | -6 | -5 | -2 | -3 | -2 | 1 | 3 | 5 | 5 | 1 | -8 | | | |
| 2000 | -4 | -5 | -4 | -6 | -6 | -4 | -3 | -2 | -2 | -0 | 1 | 3 | 5 | 3 | -0 | -11 | | | |
| 4000 | -3 | -3 | -3 | -4 | -5 | -3 | -3 | -1 | -1 | 1 | 0 | 2 | 5 | 2 | -1 | -13 | | | |
| 8000 | -4 | -2 | -3 | -5 | -5 | -3 | -3 | -0 | -1 | 1 | 1 | 2 | 4 | 3 | -2 | -15 | | | |
| OVERALL | -3 | -4 | -5 | -7 | -6 | -8 | -8 | -6 | -4 | -1 | 2 | 0 | 2 | 5 | 6 | -4 | | | |

FIGURE: 4 OVERALL SOUND PRESSURE LEVEL (OASPL) EQUAL LEVEL CONTOURS (DB)

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER
900 RPM ALL RECIP ENGINES
NO JET ENGINES

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-882-016
RUN 01
11 AUG 76
PAGE 13

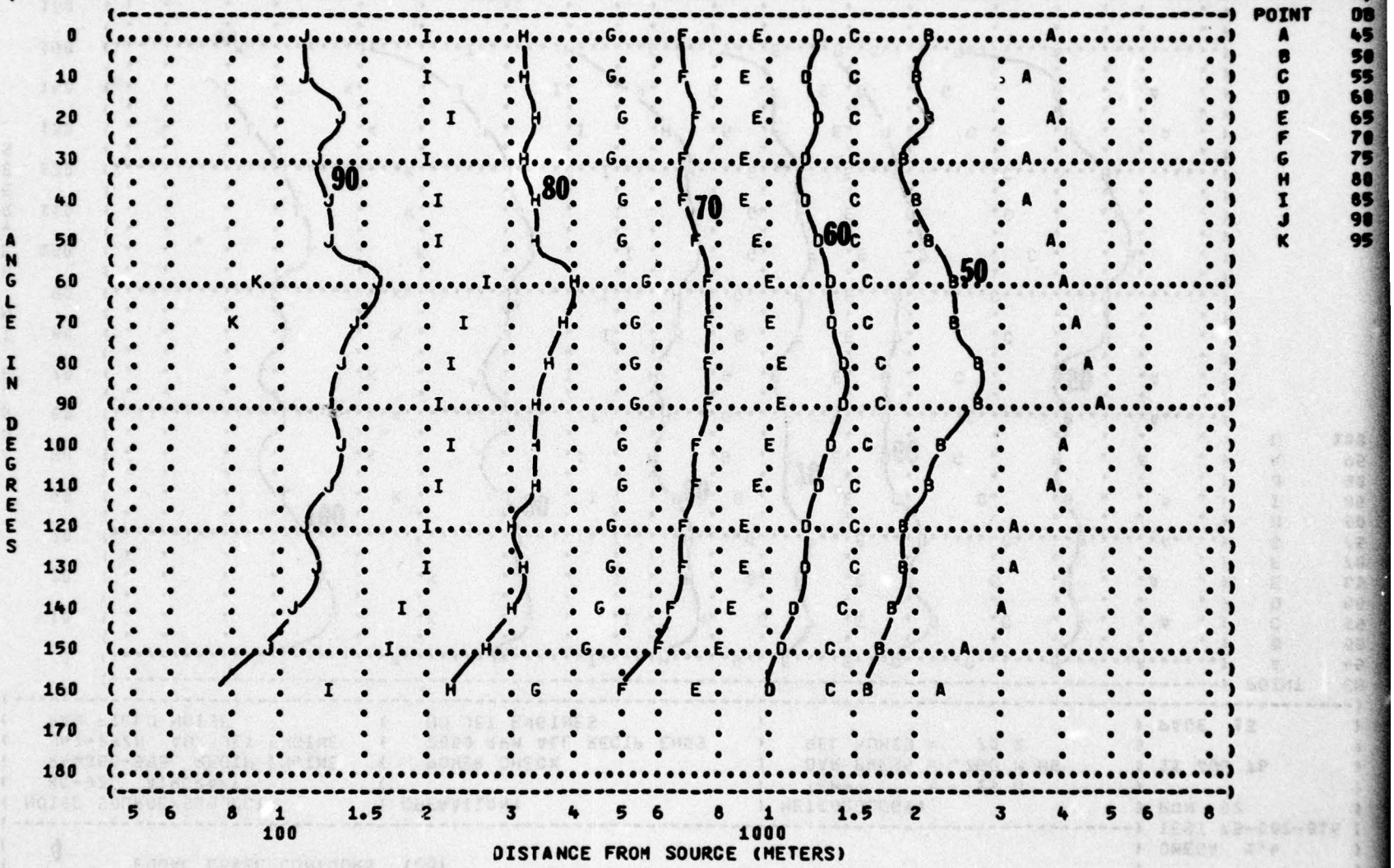


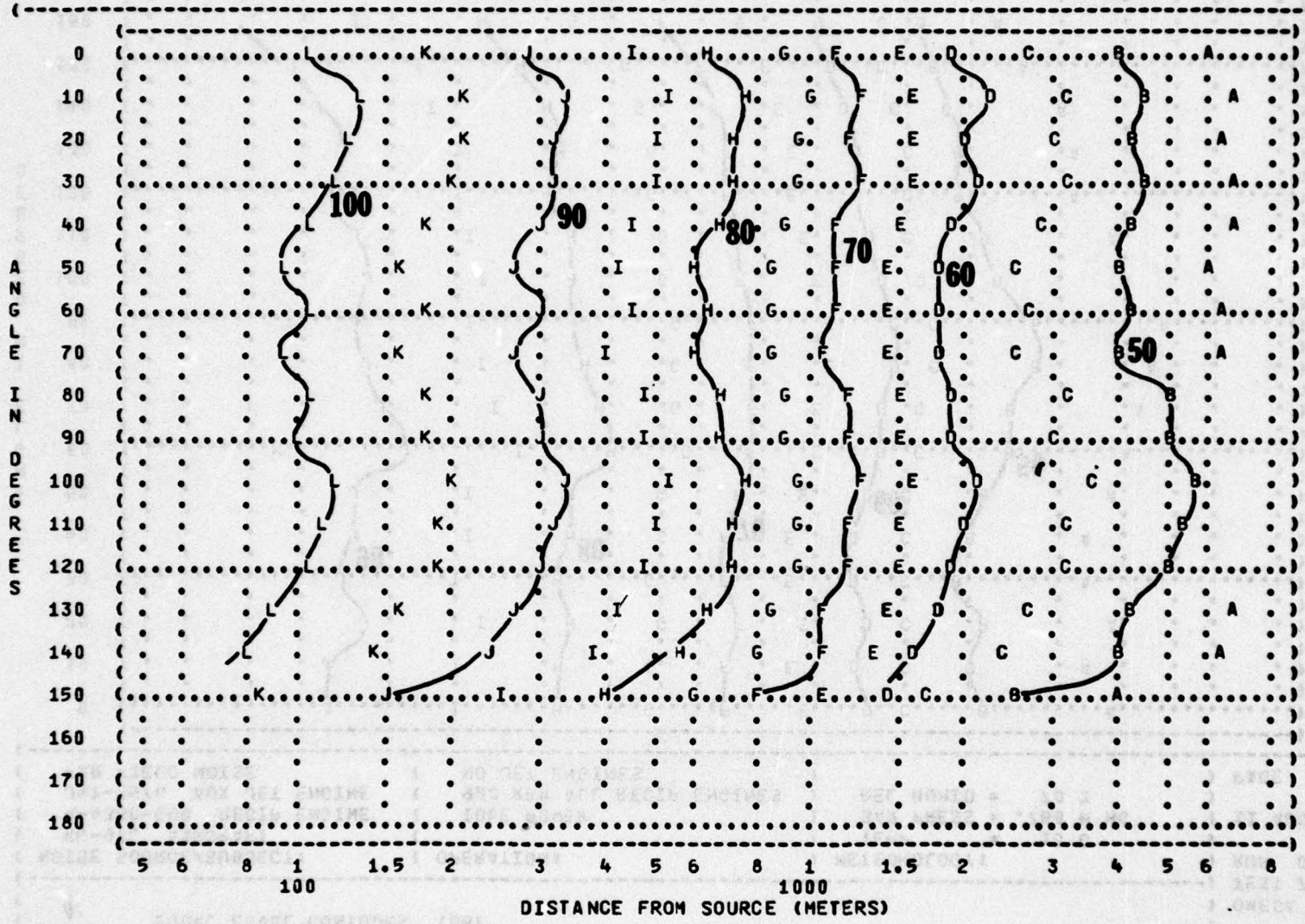
FIGURE: 4 OVERALL SOUND PRESSURE LEVEL (OASPL) EQUAL LEVEL CONTOURS (DB)

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-598 RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
POWER CHECK
2050 RPM ALL RECIP ENGS
NO JET ENGINES

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 02
11 AUG 76
PAGE 13




| POINT | DB |
|---|---|
| A | 45 |
| B | 50 |
| C | 55 |
| D | 60 |
| E | 65 |
| F | 70 |
| G | 75 |
| H | 80 |
| I | 85 |
| J | 90 |
| K | 95 |
| L | 100 |

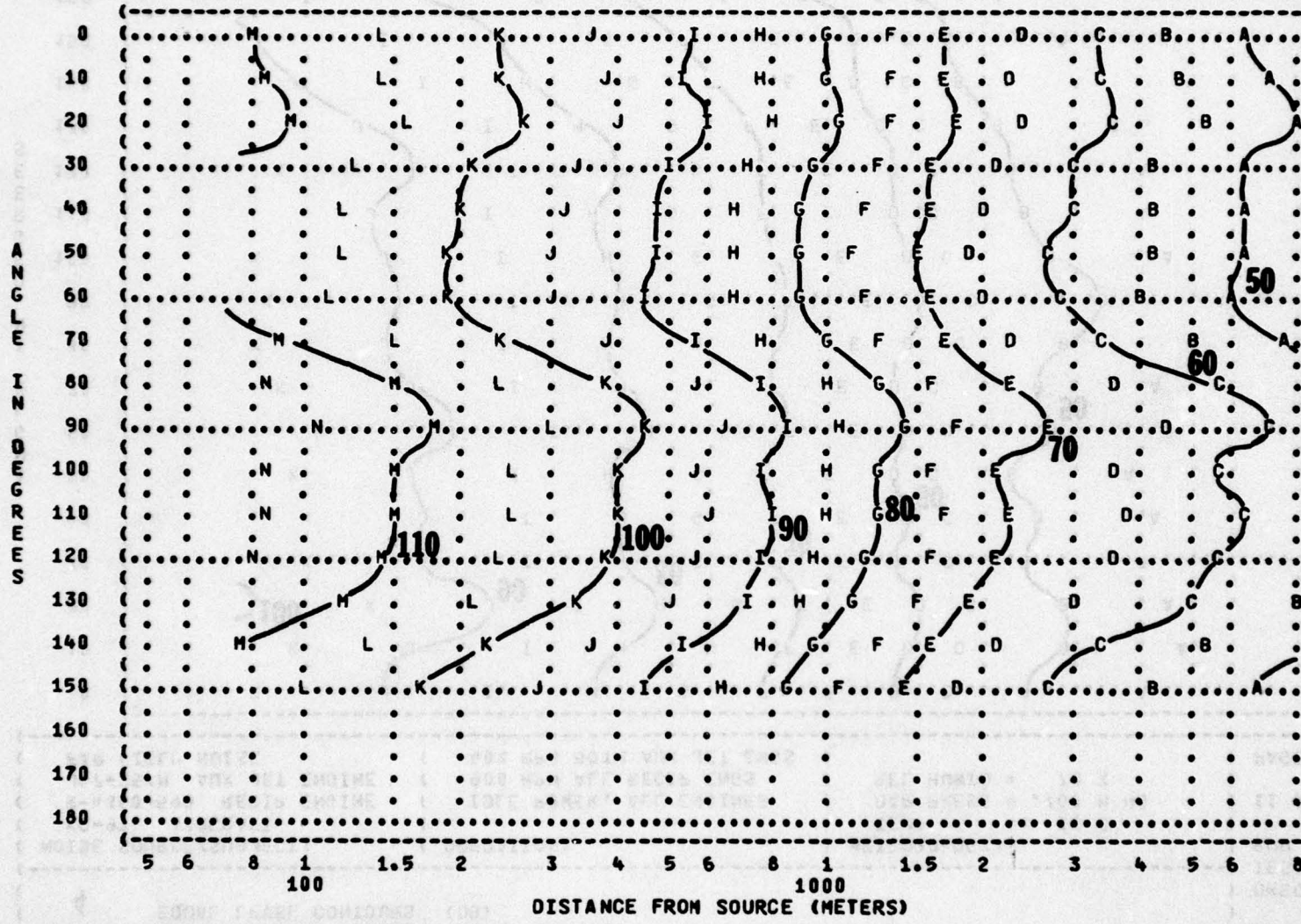
FIGURE: 4 OVERALL SOUND PRESSURE LEVEL (OASPL) EQUAL LEVEL CONTOURS (DB)

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM RECIP POWER
2650 RPM ALL RECIP ENGS
NO JET ENGINES

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 03
11 AUG 76
PAGE 13




| POINT | DB |
|---|---|
| A | 50 |
| B | 55 |
| C | 60 |
| D | 65 |
| E | 70 |
| F | 75 |
| G | 80 |
| H | 85 |
| I | 90 |
| J | 95 |
| K | 100 |
| L | 105 |
| M | 110 |
| N | 115 |

FIGURE: 4 OVERALL SOUND PRESSURE LEVEL (OASPL) EQUAL LEVEL CONTOURS (DB)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 04
11 AUG 76
PAGE 13

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-598 RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER, ALL ENGINES
900 RPM ALL RECIP ENGS
40% RPM BOTH AUX JET ENGS

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

| POINT | DB |
|---|---|
| A | 45 |
| B | 50 |
| C | 55 |
| D | 60 |
| E | 65 |
| F | 70 |
| G | 75 |
| H | 80 |
| I | 85 |
| J | 90 |
| K | 95 |
| L | 100 |

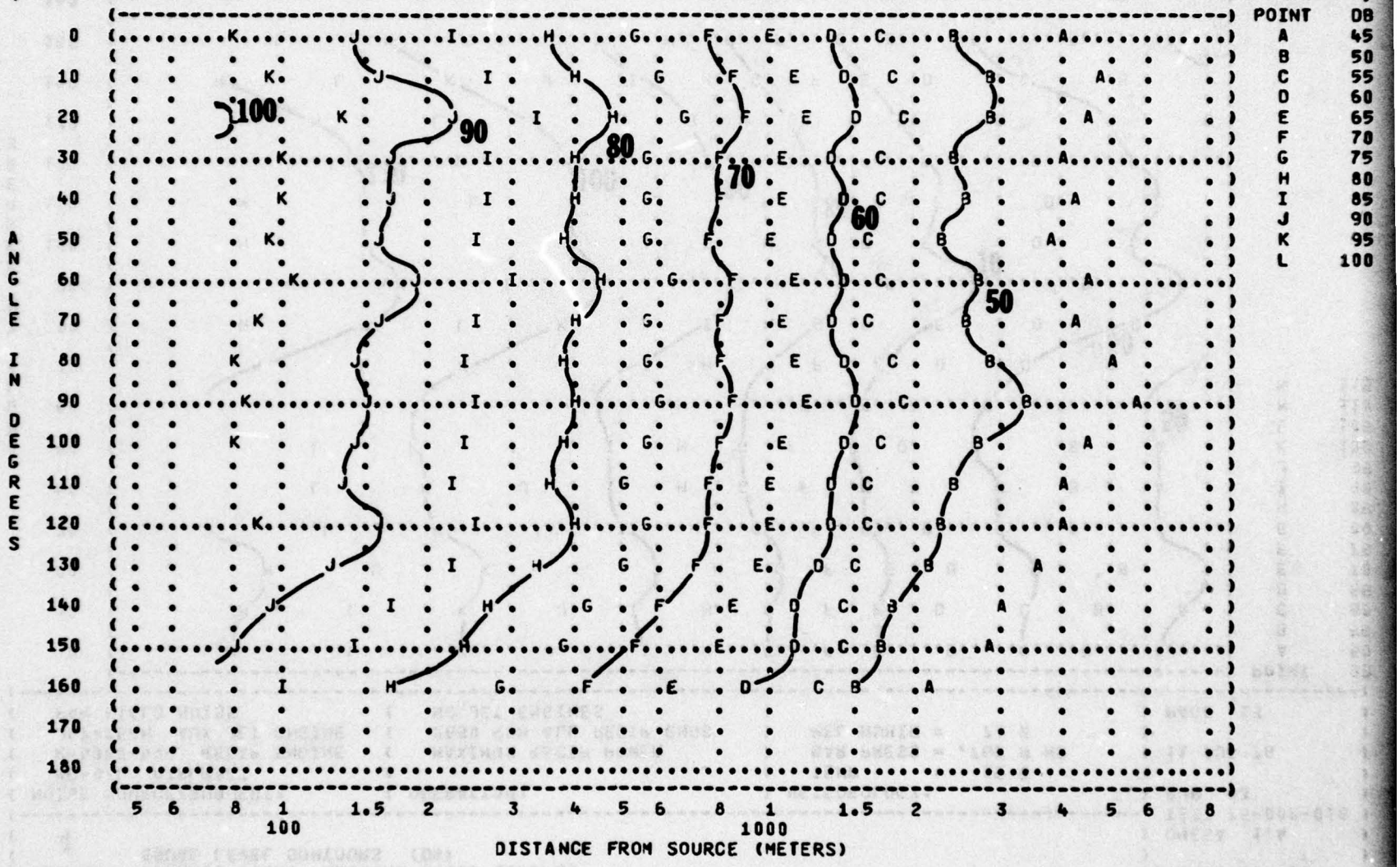


FIGURE: 4 OVERALL SOUND PRESSURE LEVEL (OASPL) EQUAL LEVEL CONTOURS (DB)

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER, ALL ENGS
2650 RPM ALL RECIP ENGS
100% RPM BOTH AUX JET ENG

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-802-016
RUN 05
11 AUG 76
PAGE 13

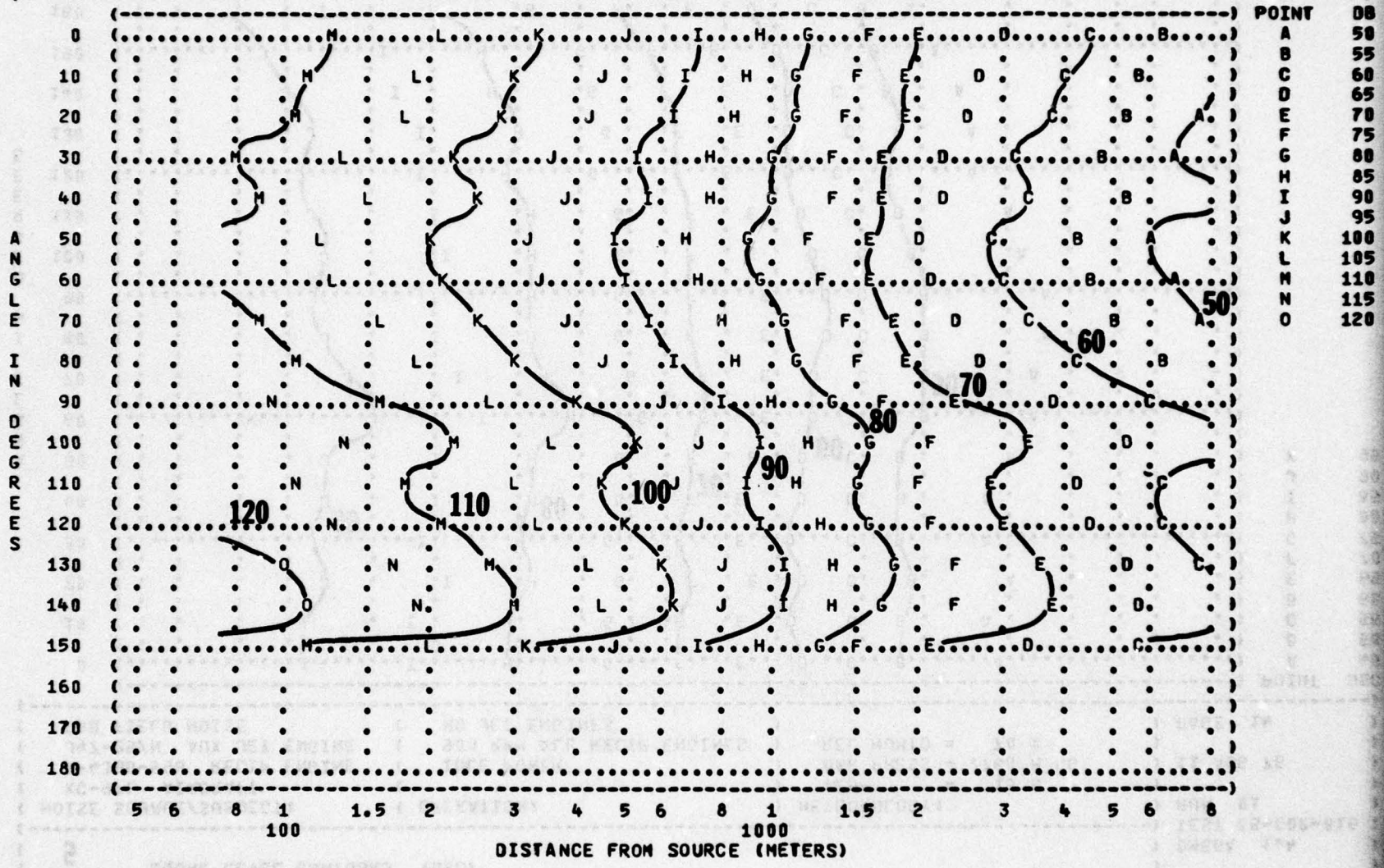


FIGURE: 5 C-WEIGHTED OVERALL SOUND LEVEL (OASLC) EQUAL LEVEL CONTOURS (DBC)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 01
11 AUG 76
PAGE 14

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER
900 RPM ALL RECIP ENGINES
NO JET ENGINES

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

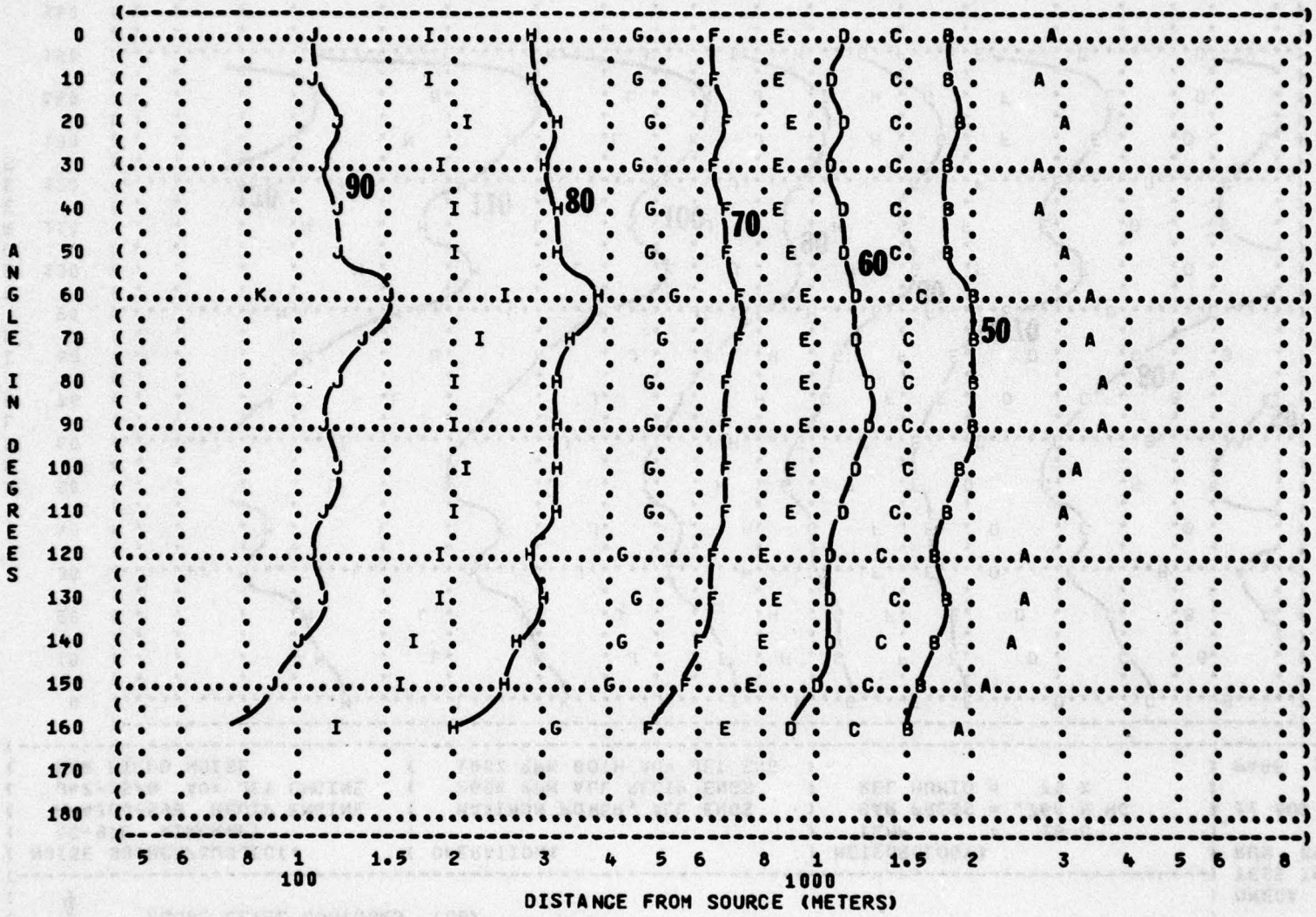


FIGURE 5: C-WEIGHTED OVERALL SOUND LEVEL (OASLC)
EQUAL LEVEL CONTOURS (DBC)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 02
11 AUG 76
PAGE 14

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
POWER CHECK
2050 RPM ALL RECIP ENGS
NO JET ENGINES

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

| POINT | DBC |
|---|---|
| A | 45 |
| B | 50 |
| C | 55 |
| D | 60 |
| E | 65 |
| F | 70 |
| G | 75 |
| H | 80 |
| I | 85 |
| J | 90 |
| K | 95 |
| L | 100 |

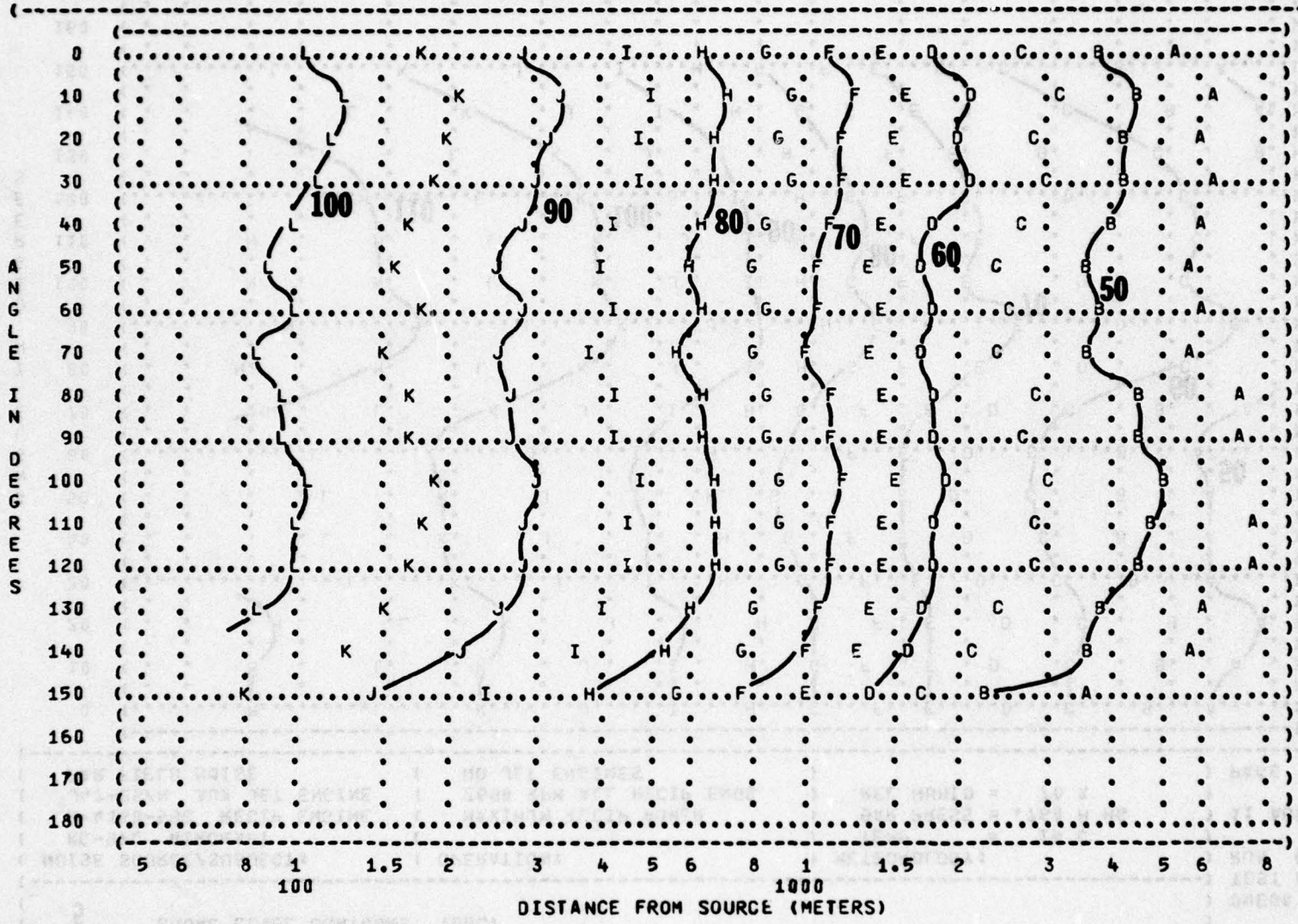


FIGURE: 5 C-WEIGHTED OVERALL SOUND LEVEL (OASLC) EQUAL LEVEL CONTOURS (DBC)

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM RECIP POWER
2650 RPM ALL RECIP ENGS
NO JET ENGINES

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 03
11 AUG 76
PAGE 14

| POINT | DBC |
|---|---|
| A | 50 |
| B | 55 |
| C | 60 |
| D | 65 |
| E | 70 |
| F | 75 |
| G | 80 |
| H | 85 |
| I | 90 |
| J | 95 |
| K | 100 |
| L | 105 |
| M | 110 |
| N | 115 |

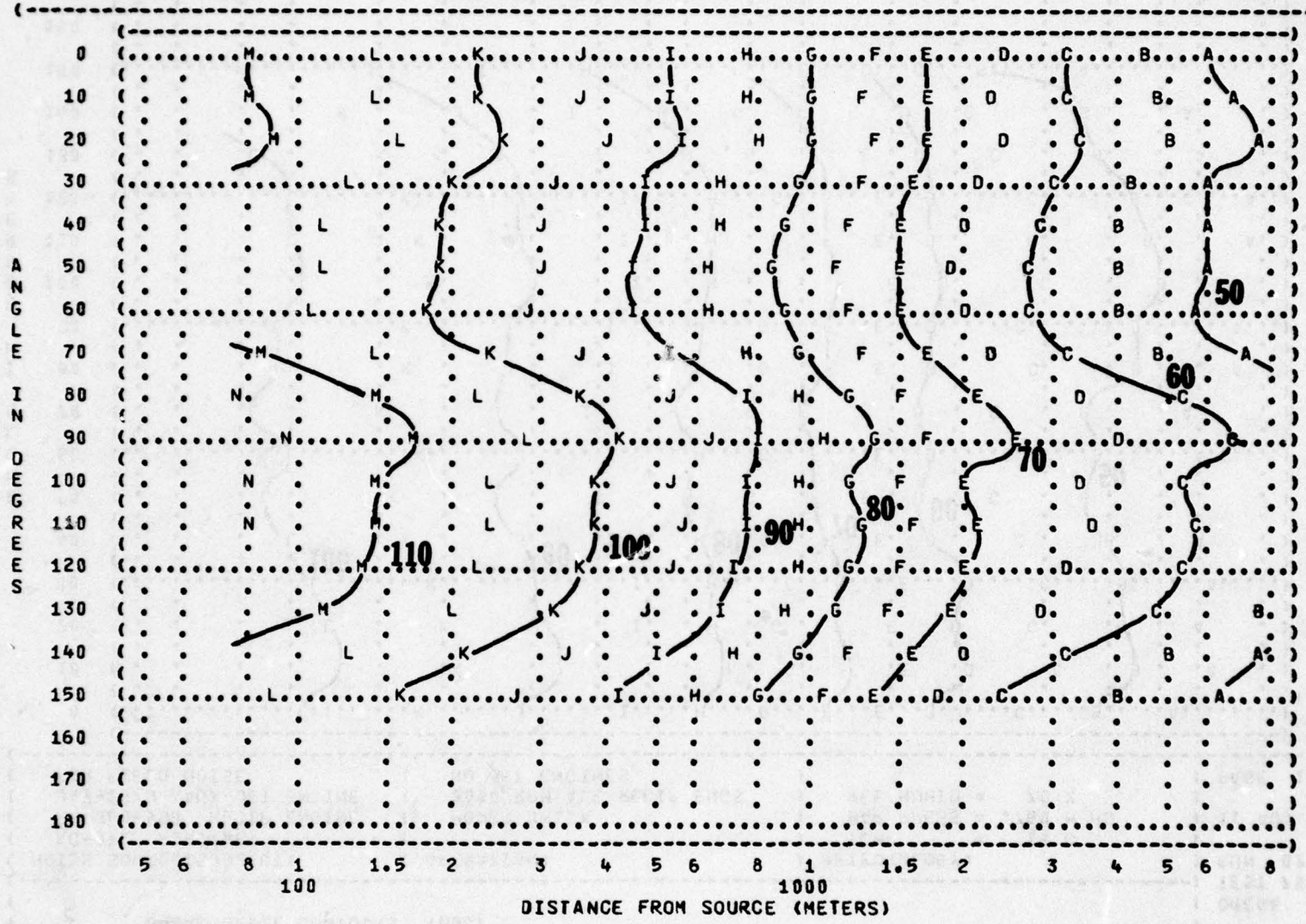


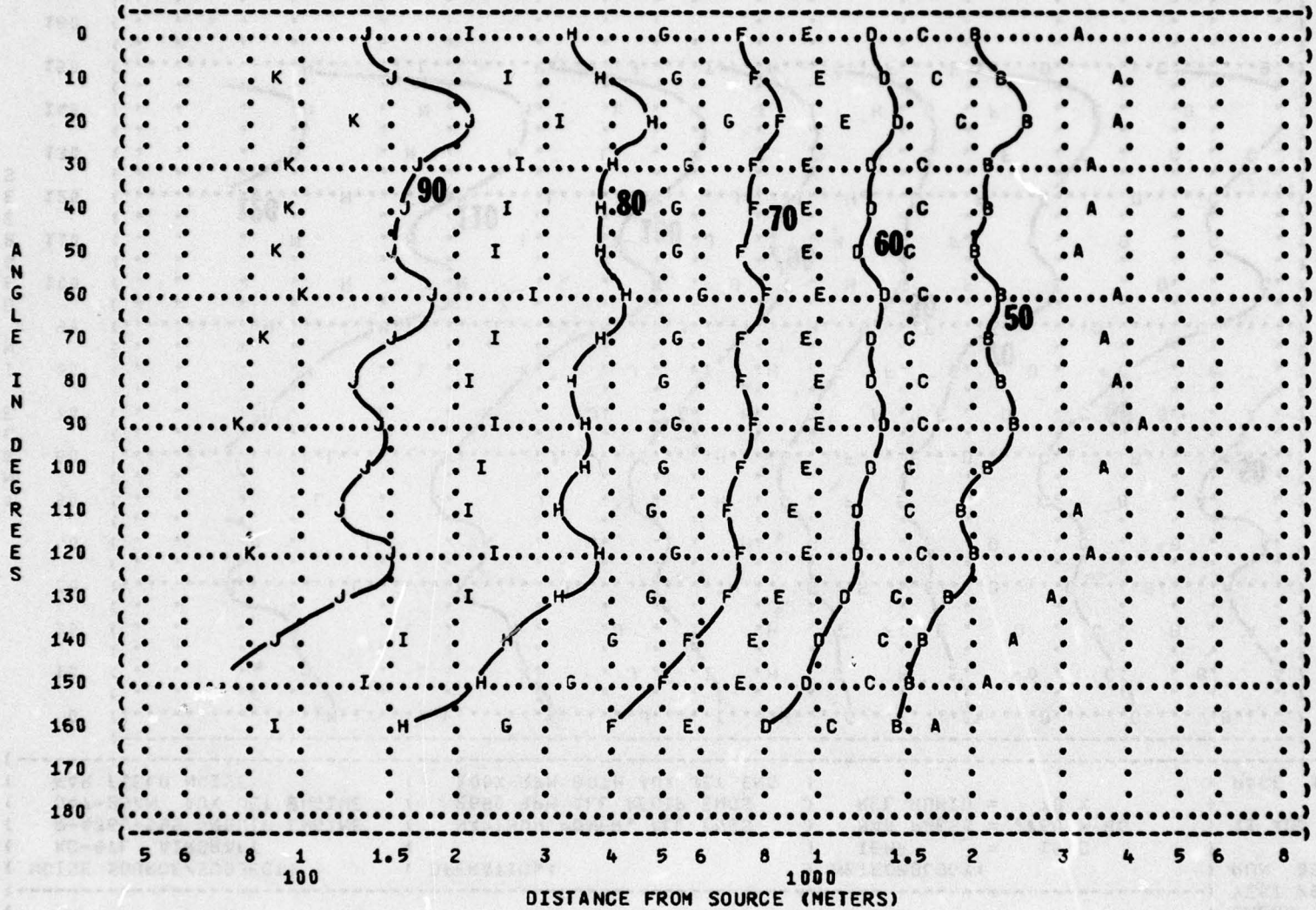
FIGURE: 5 C-WEIGHTED OVERALL SOUND LEVEL (OASLC) EQUAL LEVEL CONTOURS (DBC)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 04
11 AUG 76
PAGE 14

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER, ALL ENGINES
900 RPM ALL RECIP ENGS
40% RPM BOTH AUX JET ENGS

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %




| POINT | DBC |
|---|---|
| A | 45 |
| B | 50 |
| C | 55 |
| D | 60 |
| E | 65 |
| F | 70 |
| G | 75 |
| H | 80 |
| I | 85 |
| J | 90 |
| K | 95 |

FIGURE 5: C-WEIGHTED OVERALL SOUND LEVEL (OASLC) EQUAL LEVEL CONTOURS (DBC)

IDENTIFICATION:
OMEGA 1.4
TEST 75-082-016
RUN 05
11 AUG 76
PAGE 14

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER, ALL ENGS
2650 RPM ALL RECIP ENGS
100% RPM BOTH AUX JET ENG

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

| POINT | DBC |
|---|---|
| A | 50 |
| B | 55 |
| C | 60 |
| D | 65 |
| E | 70 |
| F | 75 |
| G | 80 |
| H | 85 |
| I | 90 |
| J | 95 |
| K | 100 |
| L | 105 |
| M | 110 |
| N | 115 |
| O | 120 |

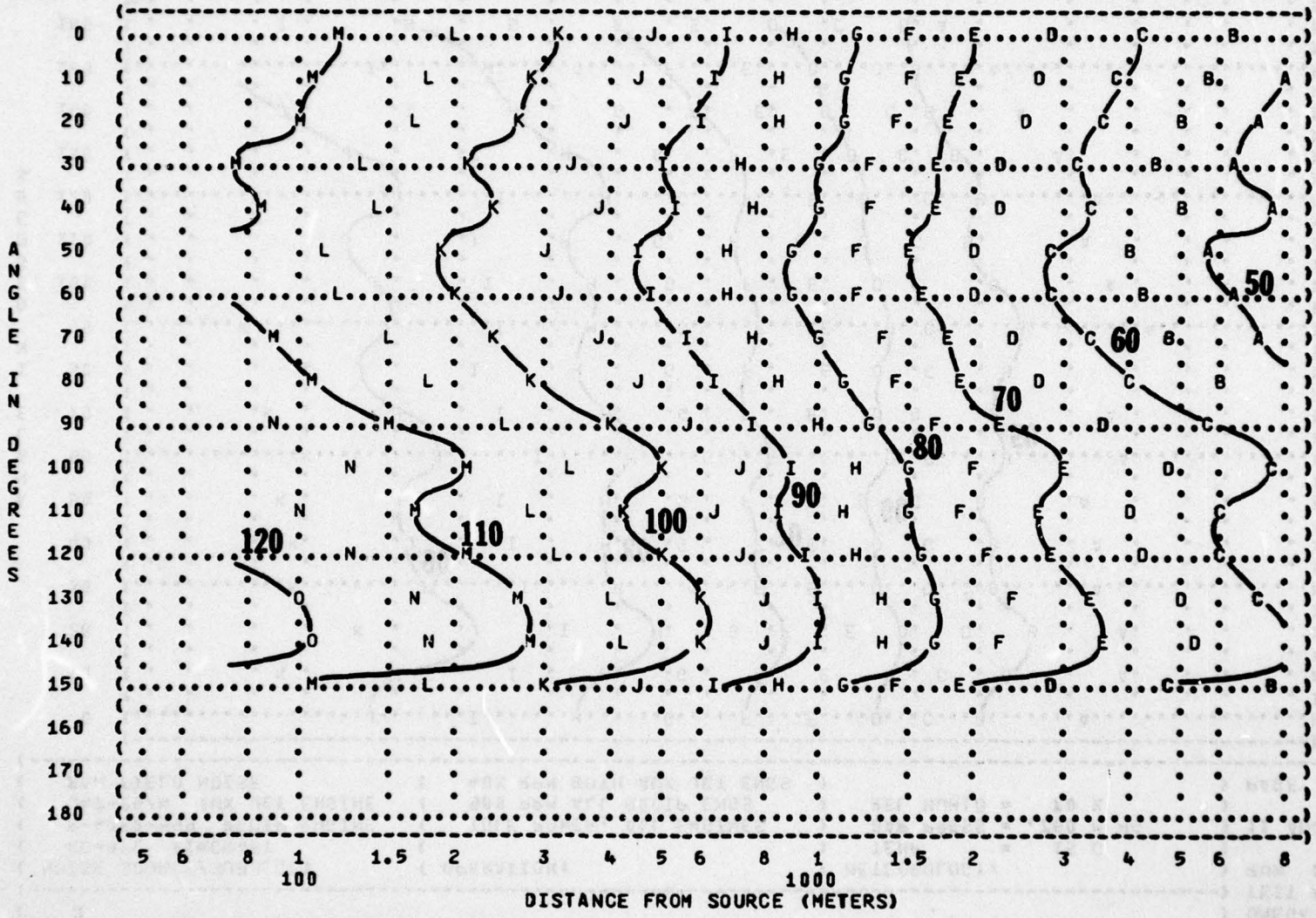


FIGURE: 6 A-WEIGHTED OVERALL SOUND LEVEL (OASLA) EQUAL LEVEL CONTOURS (DBA)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 01
11 AUG 76
PAGE 15

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER
900 RPM ALL RECIP ENGINES
NO JET ENGINES

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

| POINT | DBA |
|---|---|
| A | 45 |
| B | 50 |
| C | 55 |
| D | 60 |
| E | 65 |
| F | 70 |
| G | 75 |

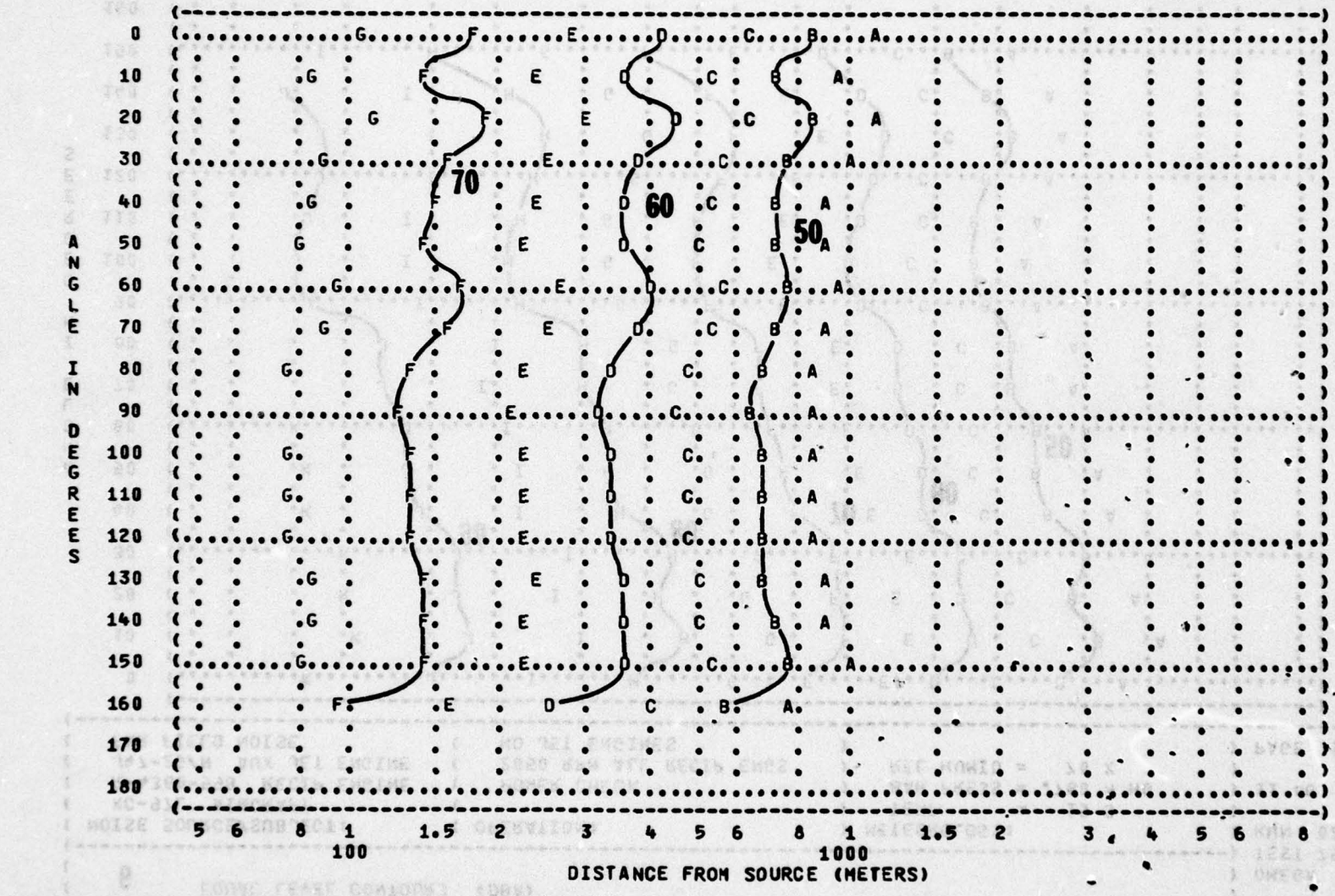


FIGURE: 6 A-WEIGHTED OVERALL SOUND LEVEL (OASLA) EQUAL LEVEL CONTOURS (DBA)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 02
11 AUG 76
PAGE 15

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
POWER CHECK
2050 RPM ALL RECIP ENGS
NO JET ENGINES

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

| POINT | DBA |
|---|---|
| A | 45 |
| B | 50 |
| C | 55 |
| D | 60 |
| E | 65 |
| F | 70 |
| G | 75 |
| H | 80 |
| I | 85 |
| J | 90 |
| K | 95 |

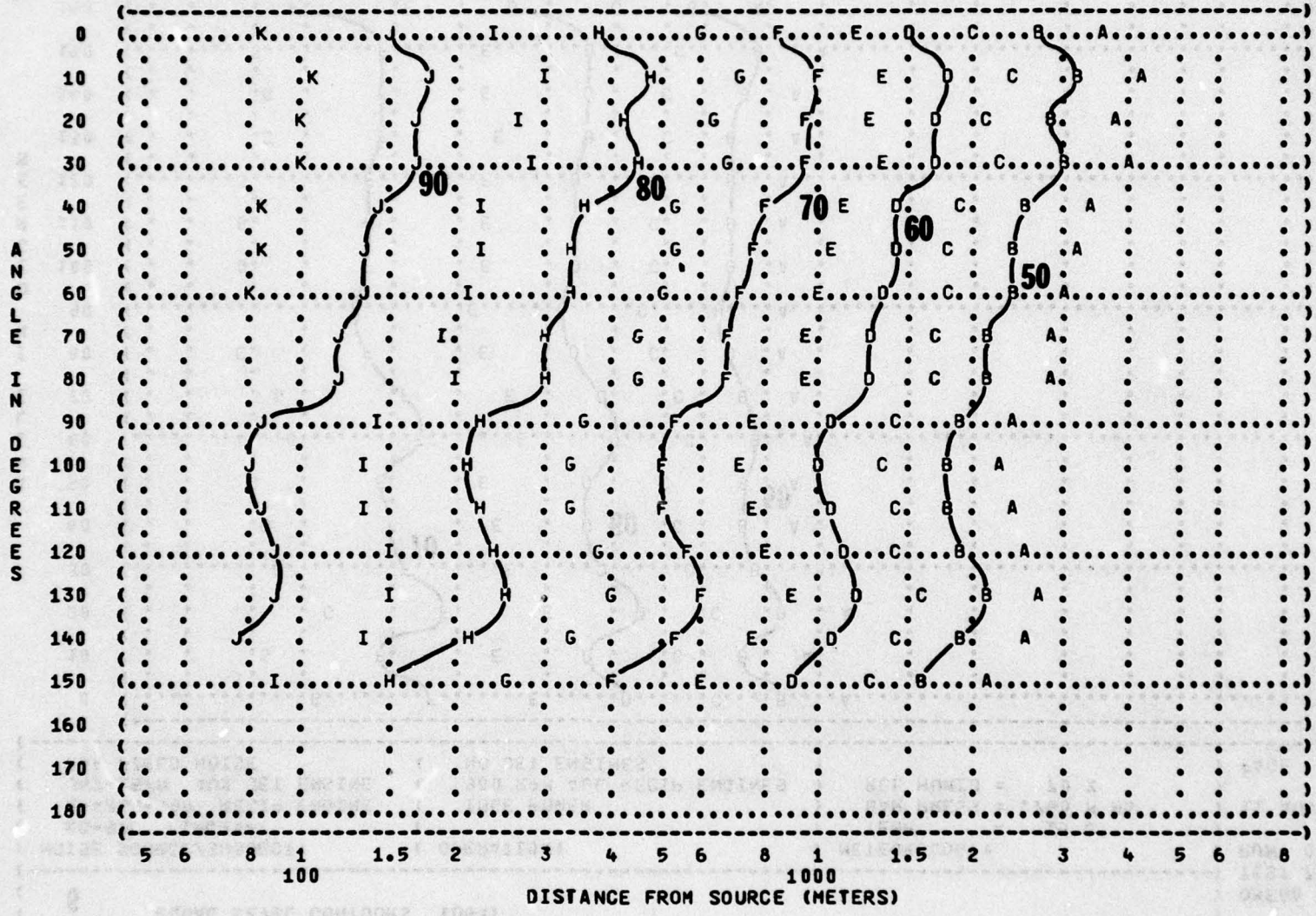


FIGURE 6: A-WEIGHTED OVERALL SOUND LEVEL (OASLA) EQUAL LEVEL CONTOURS (DBA)

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM RECIP POWER
2650 RPM ALL RECIP ENGS
NO JET ENGINES

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 03
11 AUG 76
PAGE 15

| POINT | DBA |
|---|---|
| A | 45 |
| B | 50 |
| C | 55 |
| D | 60 |
| E | 65 |
| F | 70 |
| G | 75 |
| H | 80 |
| I | 85 |
| J | 90 |
| K | 95 |
| L | 100 |
| M | 105 |

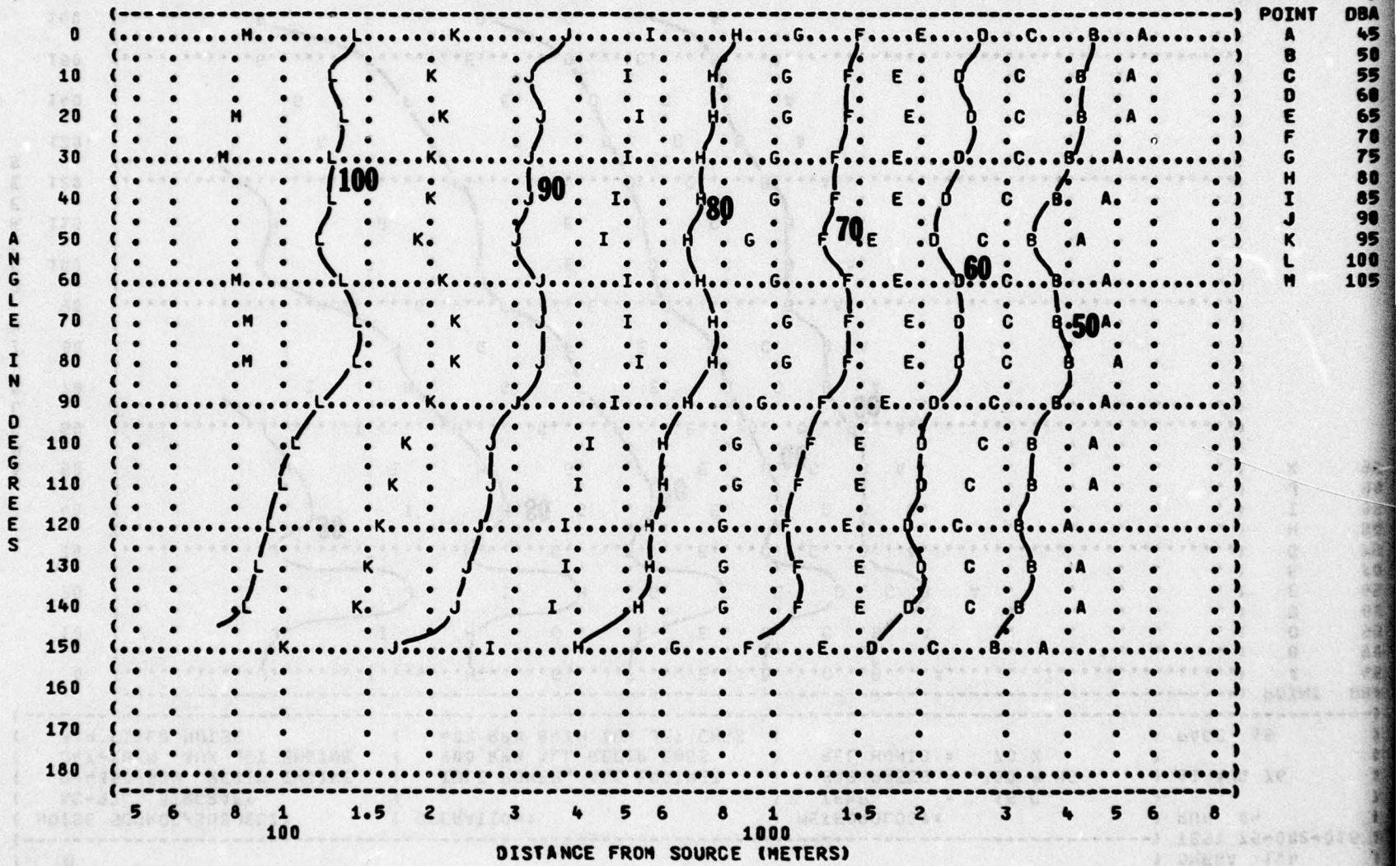


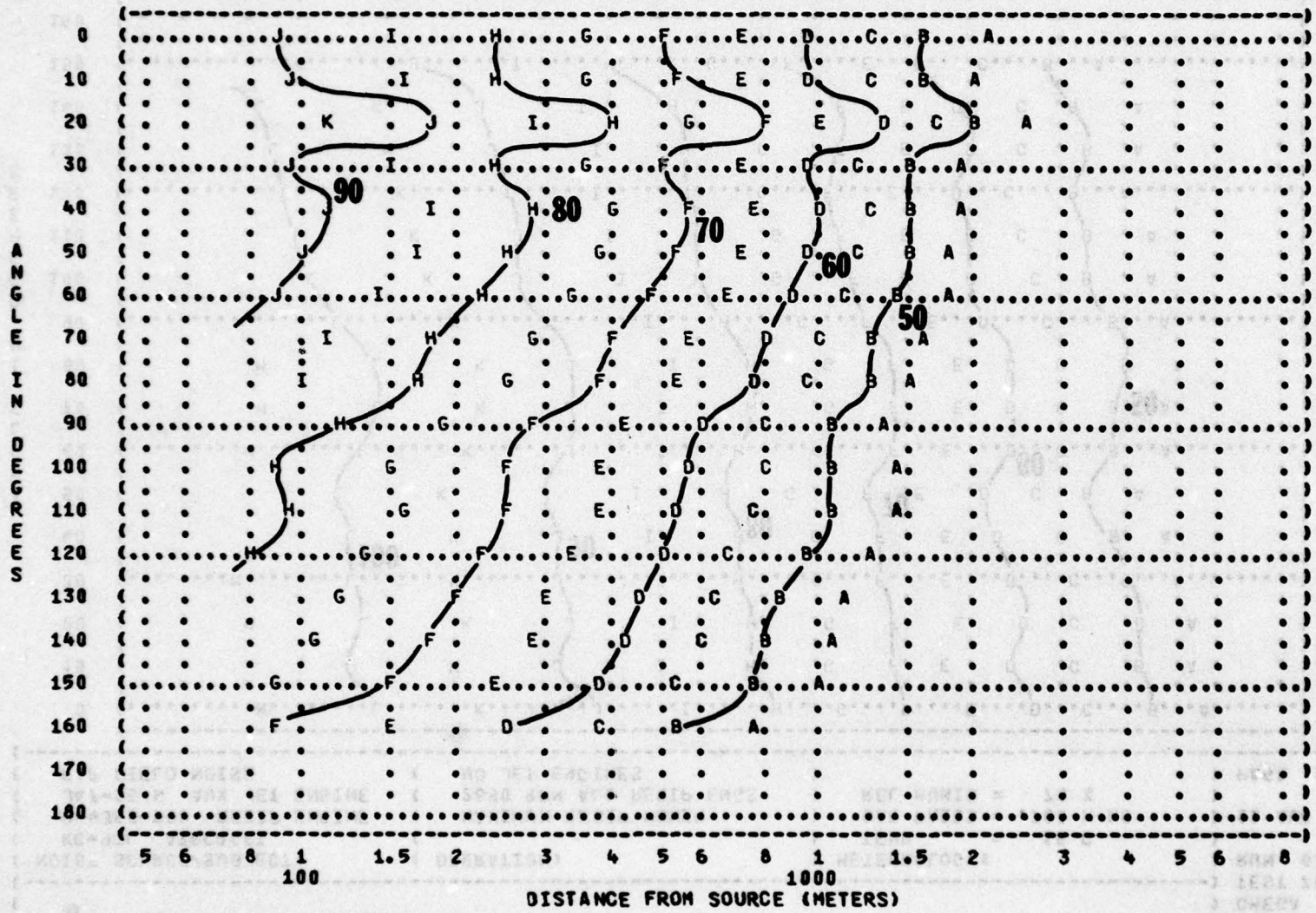
FIGURE: 6 — A-WEIGHTED OVERALL SOUND LEVEL (OASLA) EQUAL LEVEL CONTOURS (DBA)

IDENTIFICATION:
OMEGA 1.4
TEST 75-082-016
RUN 04
11 AUG 76
PAGE 15

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER, ALL ENGINES
900 RPM ALL RECIP ENGS
40% RPM BOTH AUX JET ENGS

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %




| POINT | DBA |
|---|---|
| A | 45 |
| B | 50 |
| C | 55 |
| D | 60 |
| E | 65 |
| F | 70 |
| G | 75 |
| H | 80 |
| I | 85 |
| J | 90 |
| K | 95 |

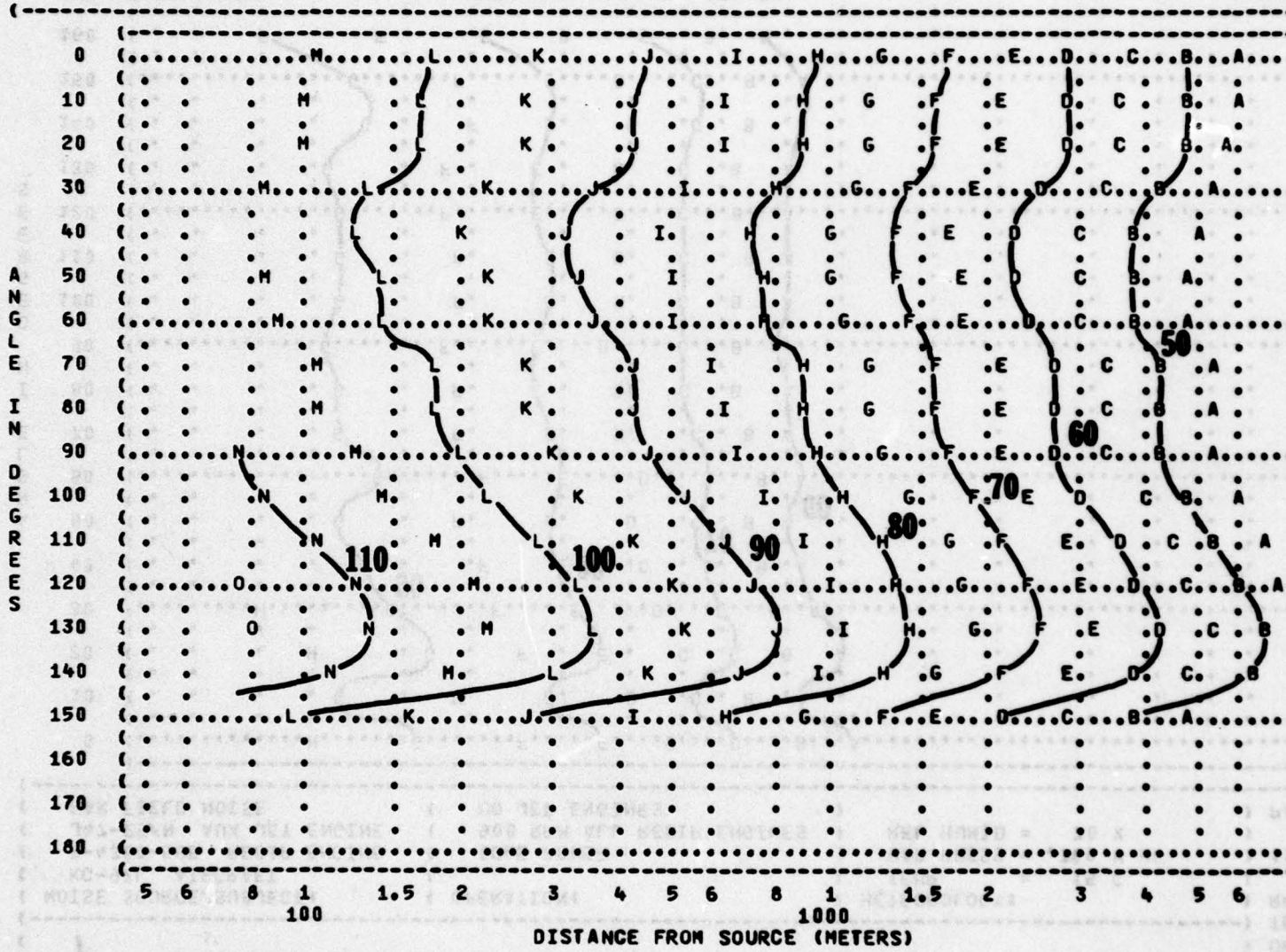
FIGURE: 6 A-WEIGHTED OVERALL SOUND LEVEL (OASLA) EQUAL LEVEL CONTOURS (DBA)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 05
11 AUG 76
PAGE 15

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER, ALL ENGS
2650 RPM ALL RECIP ENGS
100% RPM BOTH AUX JET ENG

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %




| POINT | DBA |
|---|---|
| A | 45 |
| B | 50 |
| C | 55 |
| D | 60 |
| E | 65 |
| F | 70 |
| G | 75 |
| H | 80 |
| I | 85 |
| J | 90 |
| K | 95 |
| L | 100 |
| M | 105 |
| N | 110 |
| O | 115 |

FIGURE: 7 PERCEIVED NOISE LEVEL WITH SMOOTH TONE CORRECTION (PNLT)
EQUAL LEVEL CONTOURS (PNDB)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 01
11 AUG 76
PAGE 16

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-598 RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER
900 RPM ALL RECIP ENGINES
NO JET ENGINES

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

| POINT | PNDB |
|---|---|
| A | 60 |
| B | 65 |
| C | 70 |
| D | 75 |
| E | 80 |
| F | 85 |
| G | 90 |
| H | 95 |

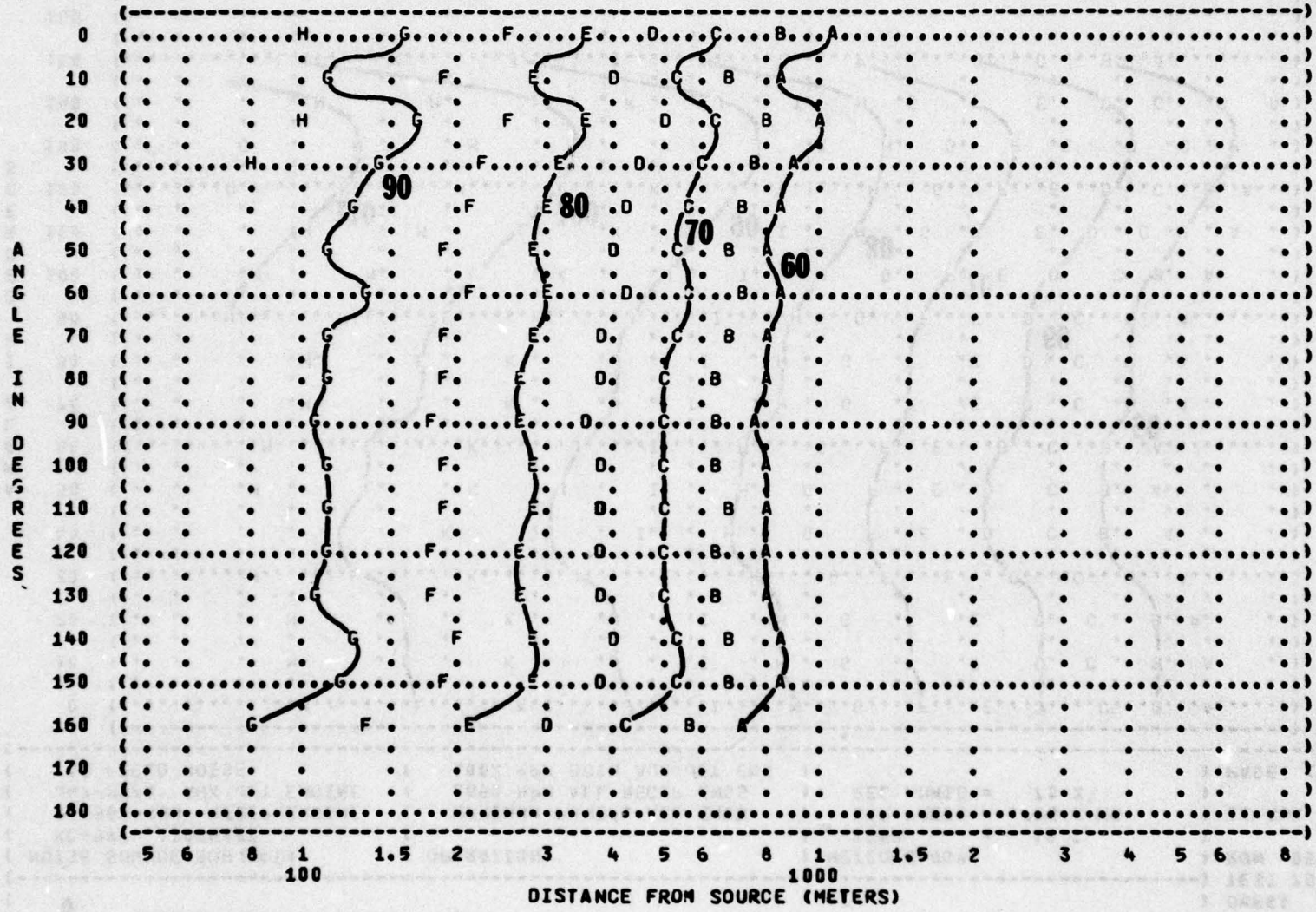


FIGURE 7 PERCEIVED NOISE LEVEL WITH SMOOTH TONE CORRECTION (PNLT) EQUAL LEVEL CONTOURS (PNDB)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 02
11 AUG 76
PAGE 16

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
POWER CHECK
2050 RPM ALL RECIP ENGS
NO JET ENGINES

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

| POINT | PNDB |
|---|---|
| A | 60 |
| B | 65 |
| C | 70 |
| D | 75 |
| E | 80 |
| F | 85 |
| G | 90 |
| H | 95 |
| I | 100 |
| J | 105 |
| K | 110 |

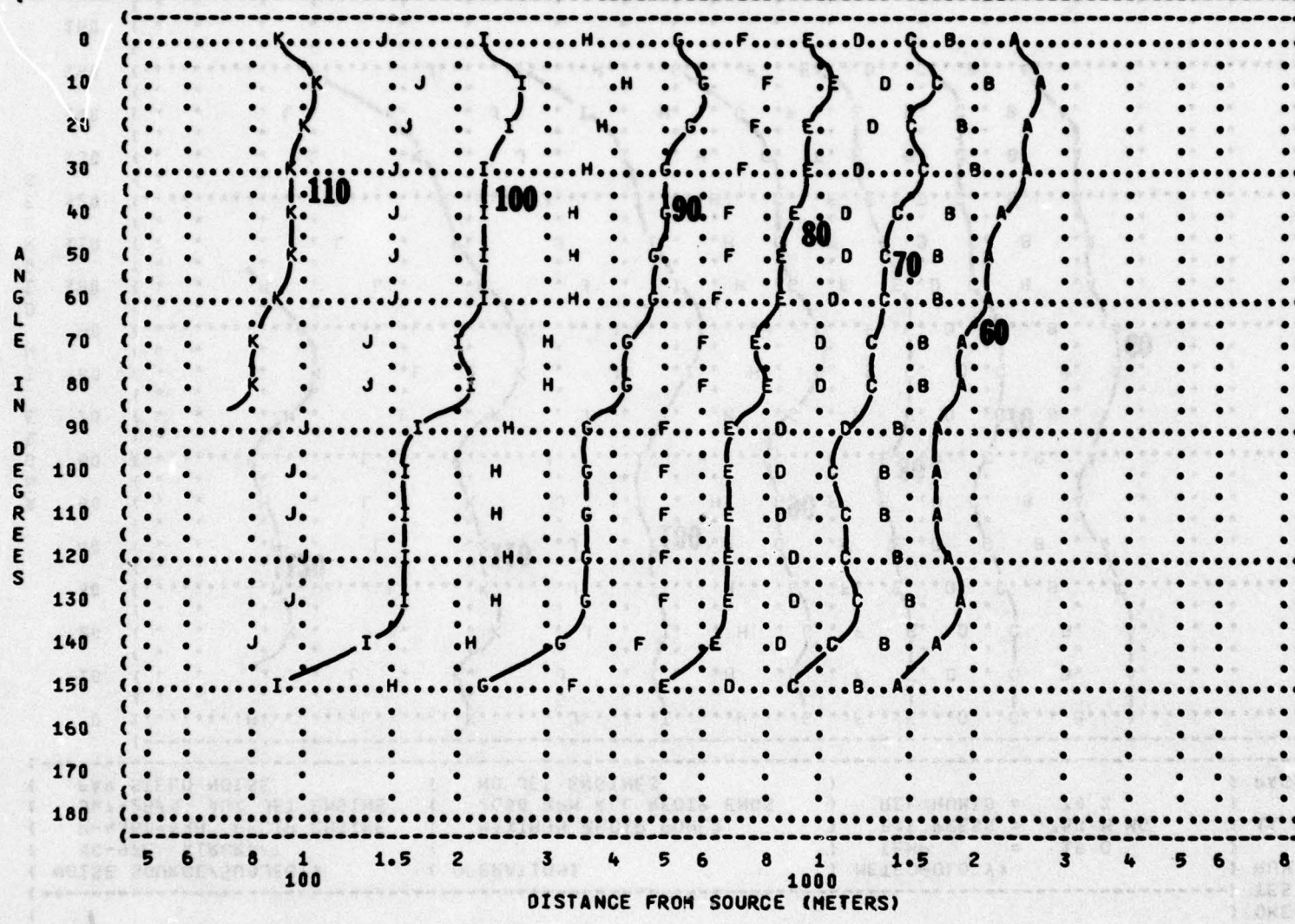


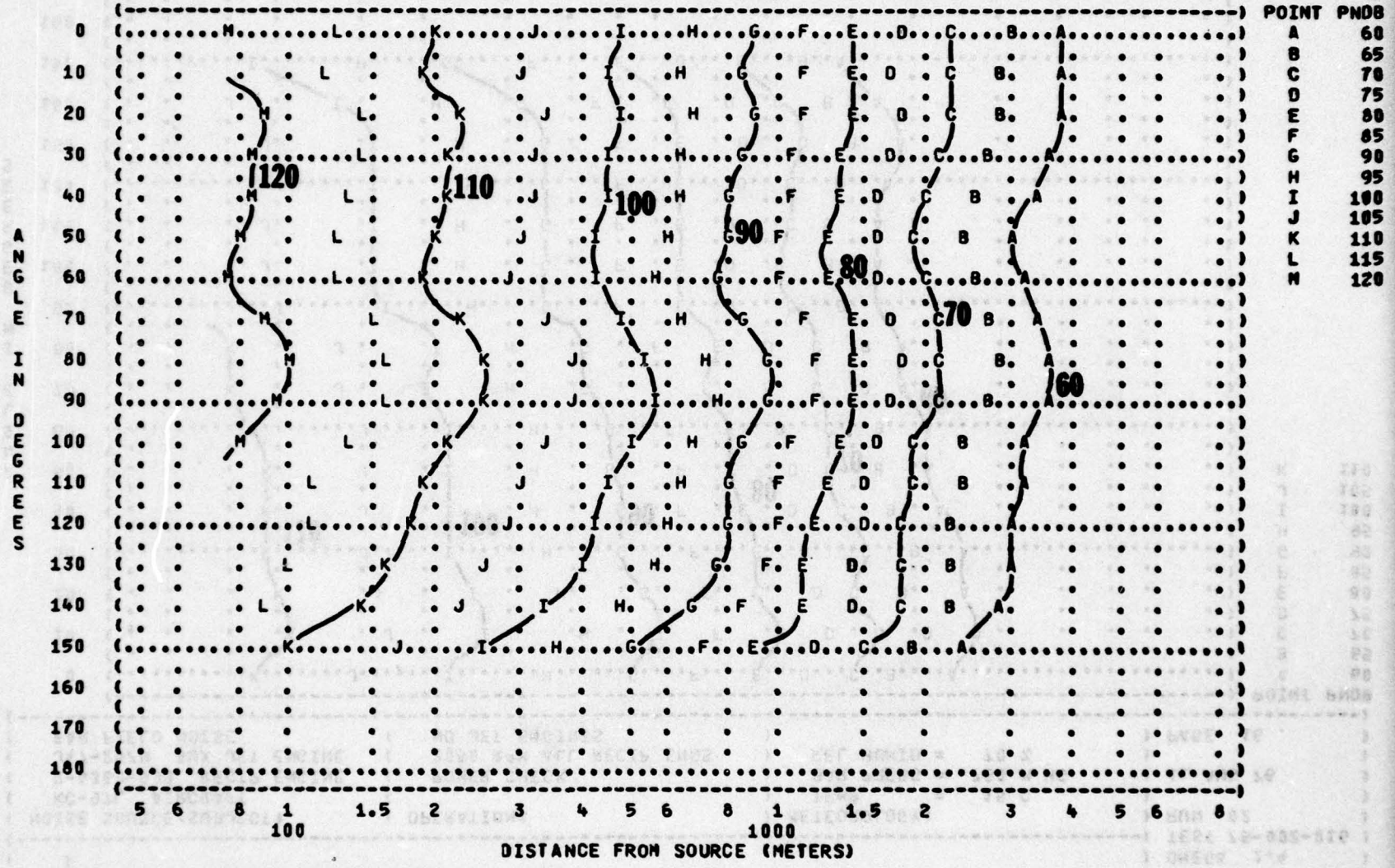
FIGURE: 7 PERCEIVED NOISE LEVEL WITH SMOOTH TONE CORRECTION (PNLT)
EQUAL LEVEL CONTOURS (PNDB)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 03
11 AUG 76
PAGE 16

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM RECIP POWER
2650 RPM ALL RECIP ENGS
NO JET ENGINES

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %




| POINT | PNDB |
|---|---|
| A | 60 |
| B | 65 |
| C | 70 |
| D | 75 |
| E | 80 |
| F | 85 |
| G | 90 |
| H | 95 |
| I | 100 |
| J | 105 |
| K | 110 |
| L | 115 |
| M | 120 |

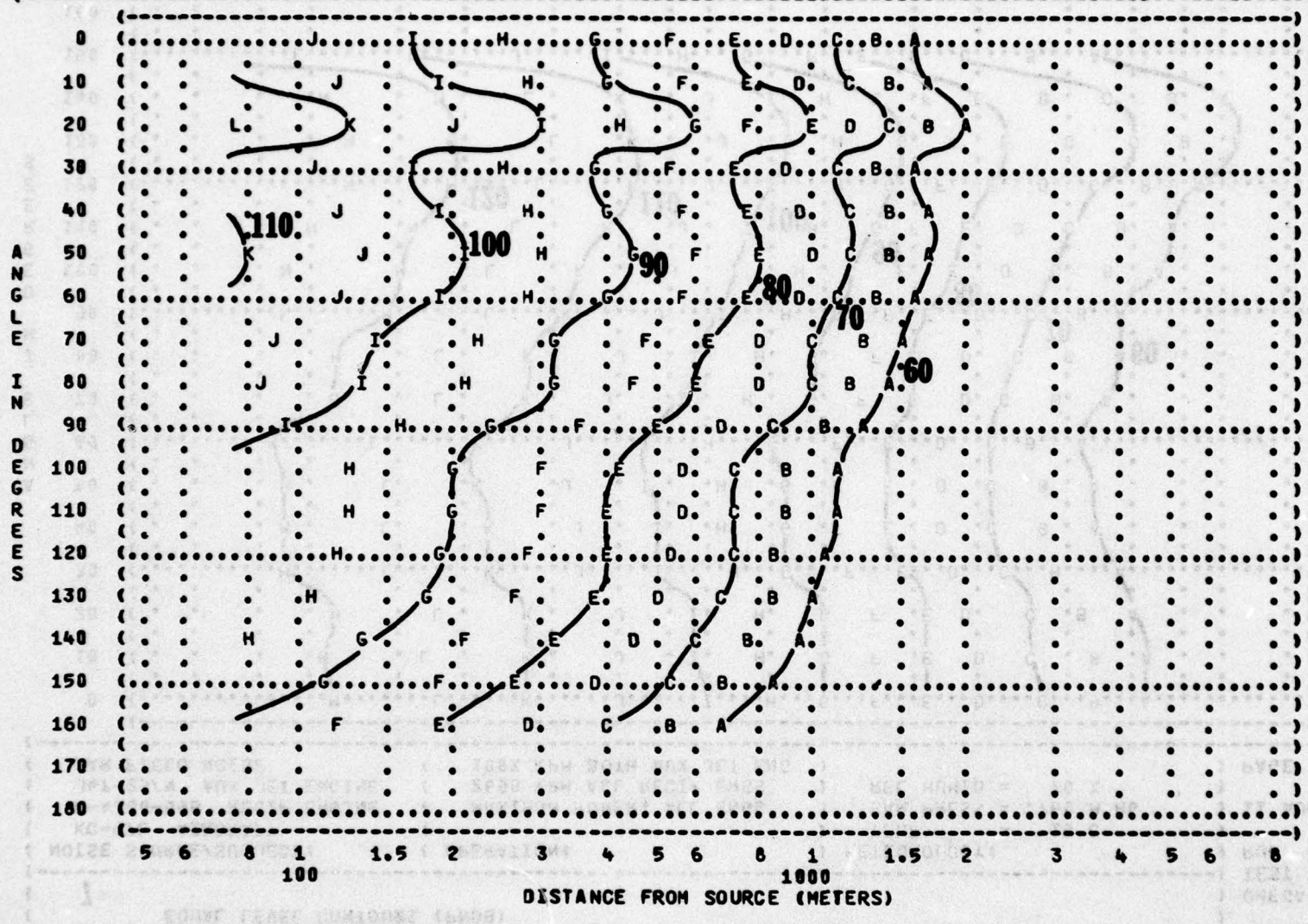
FIGURE: 7 PERCEIVED NOISE LEVEL WITH SMOOTH TONE CORRECTION (PNLT)
EQUAL LEVEL CONTOURS (PNDB)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 04
11 AUG 76
PAGE 16

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER, ALL ENGINES
900 RPM ALL RECIP ENGS
40% RPM BOTH AUX JET ENGS

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %




| POINT | PNDB |
|---|---|
| A | 60 |
| B | 65 |
| C | 70 |
| D | 75 |
| E | 80 |
| F | 85 |
| G | 90 |
| H | 95 |
| I | 100 |
| J | 105 |
| K | 110 |
| L | 115 |

FIGURE: PERCEIVED NOISE LEVEL WITH SMOOTH TONE CORRECTION (PNLT)
EQUAL LEVEL CONTOURS (PNDB)

7

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER, ALL ENGS
2650 RPM ALL RECIP ENGS
100% RPM BOTH AUX JET ENG

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 05
11 AUG 76
PAGE 16

| POINT | PNDB |
|---|---|
| A | 60 |
| B | 65 |
| C | 70 |
| D | 75 |
| E | 80 |
| F | 85 |
| G | 90 |
| H | 95 |
| I | 100 |
| J | 105 |
| K | 110 |
| L | 115 |
| M | 120 |
| N | 125 |

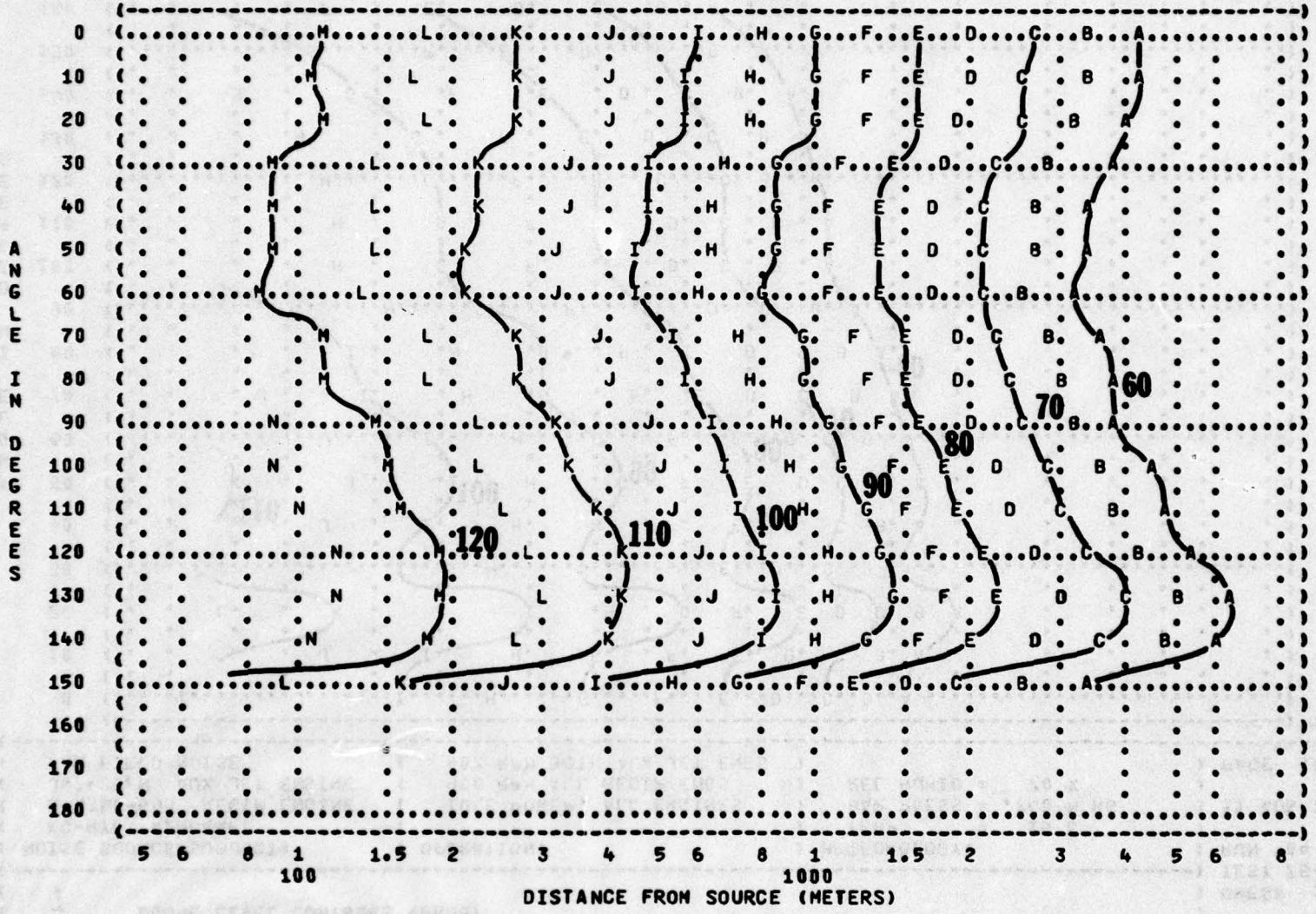


FIGURE: 8 PREFERRED SPEECH INTERFERENCE LEVEL (PSIL) EQUAL LEVEL CONTOURS (DB)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 01
11 AUG 76
PAGE 17

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER
900 RPM ALL RECIP ENGINES
NO JET ENGINES

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

| POINT | DB |
|---|---|
| A | 35 |
| B | 40 |
| C | 45 |
| D | 50 |
| E | 55 |
| F | 60 |
| G | 65 |

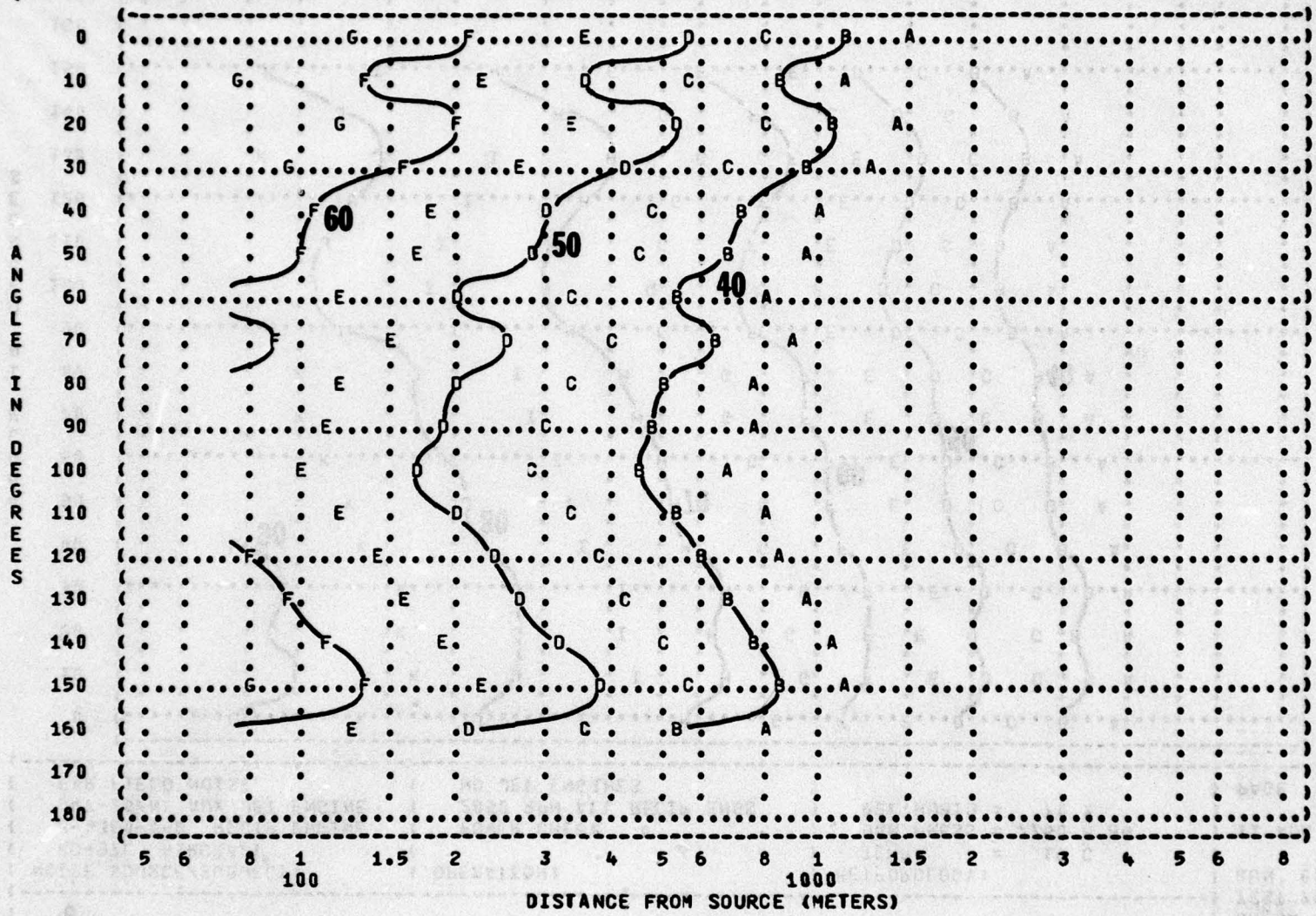


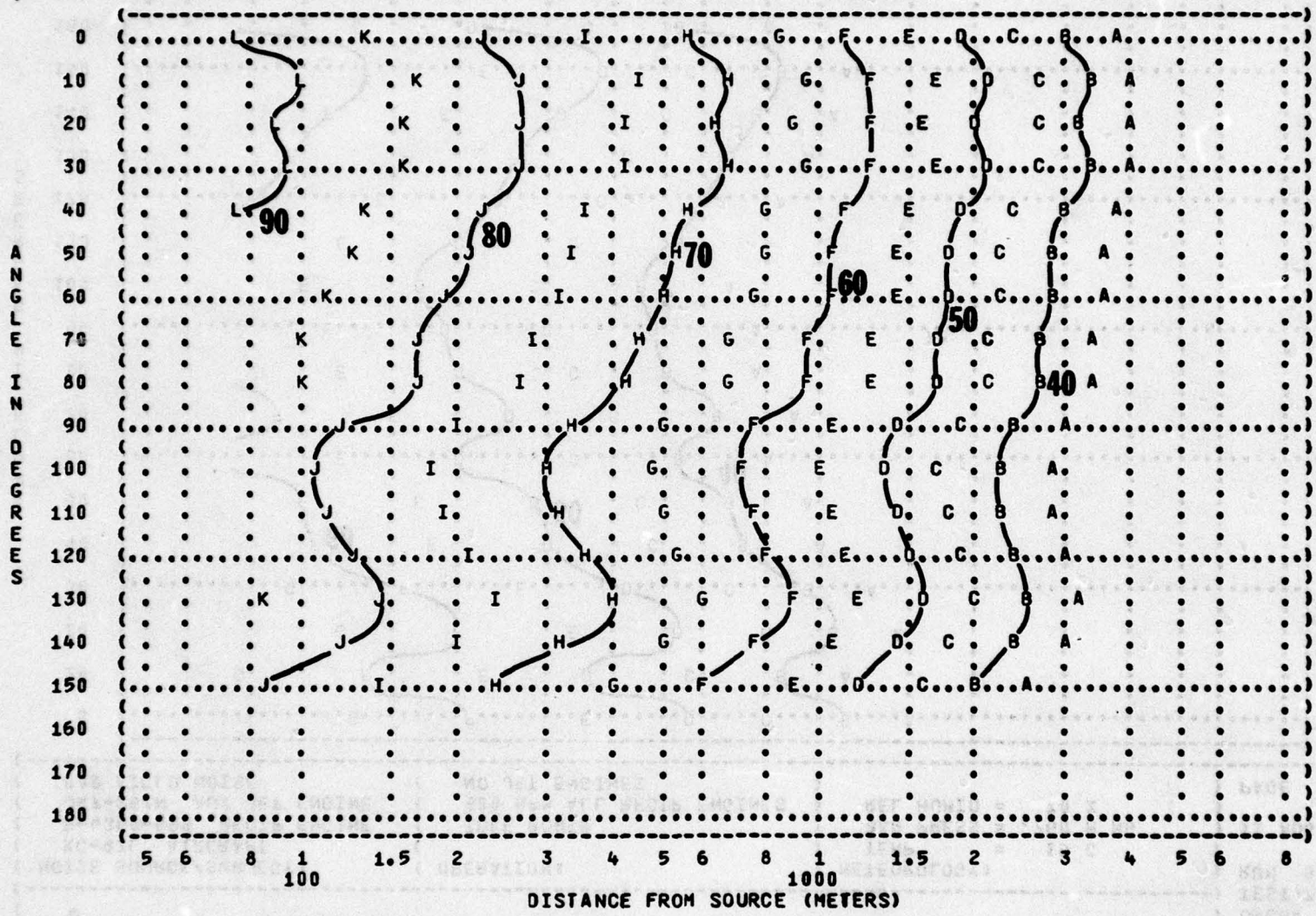
FIGURE 8: PREFERRED SPEECH INTERFERENCE LEVEL (PSIL) EQUAL LEVEL CONTOURS (DB)

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
POWER CHECK
2050 RPM ALL RECIP ENGS
NO JET ENGINES

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-802-016
RUN 02
11 AUG 76
PAGE 17




| POINT | DB |
|---|---|
| A | 35 |
| B | 40 |
| C | 45 |
| D | 50 |
| E | 55 |
| F | 60 |
| G | 65 |
| H | 70 |
| I | 75 |
| J | 80 |
| K | 85 |
| L | 90 |

FIGURE 8: PREFERRED SPEECH INTERFERENCE LEVEL (PSIL) EQUAL LEVEL CONTOURS (DB)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 03
11 AUG 76
PAGE 17

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM RECIP POWER
2650 RPM ALL RECIP ENGS
NO JET ENGINES

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

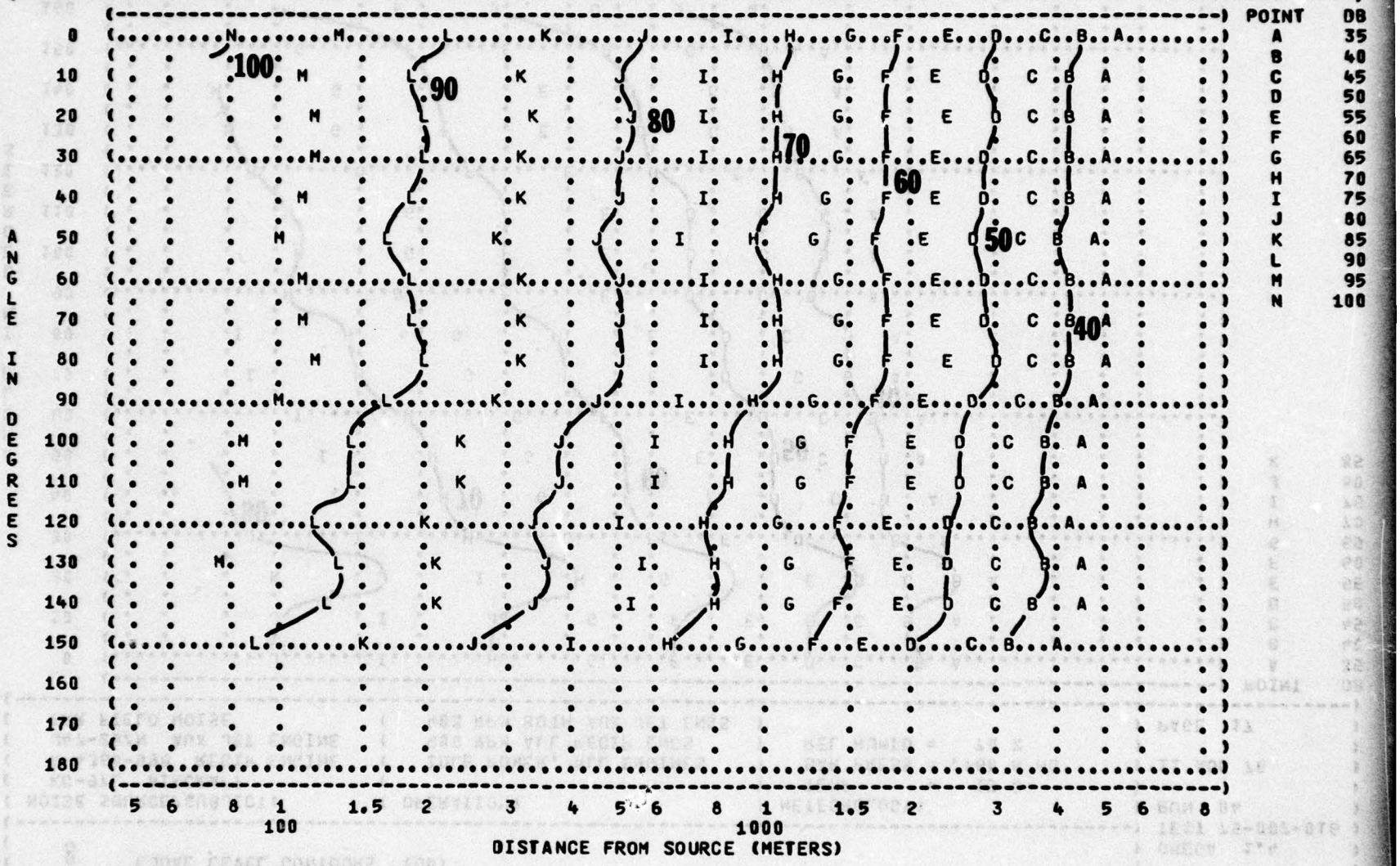


FIGURE 8: PREFERRED SPEECH INTERFERENCE LEVEL (PSIL) EQUAL LEVEL CONTOURS (DB)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 04
11 AUG 76
PAGE 17

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-598 RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER, ALL ENGINES
900 RPM ALL RECIP ENGS
40% RPM BOTH AUX JET ENGS

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

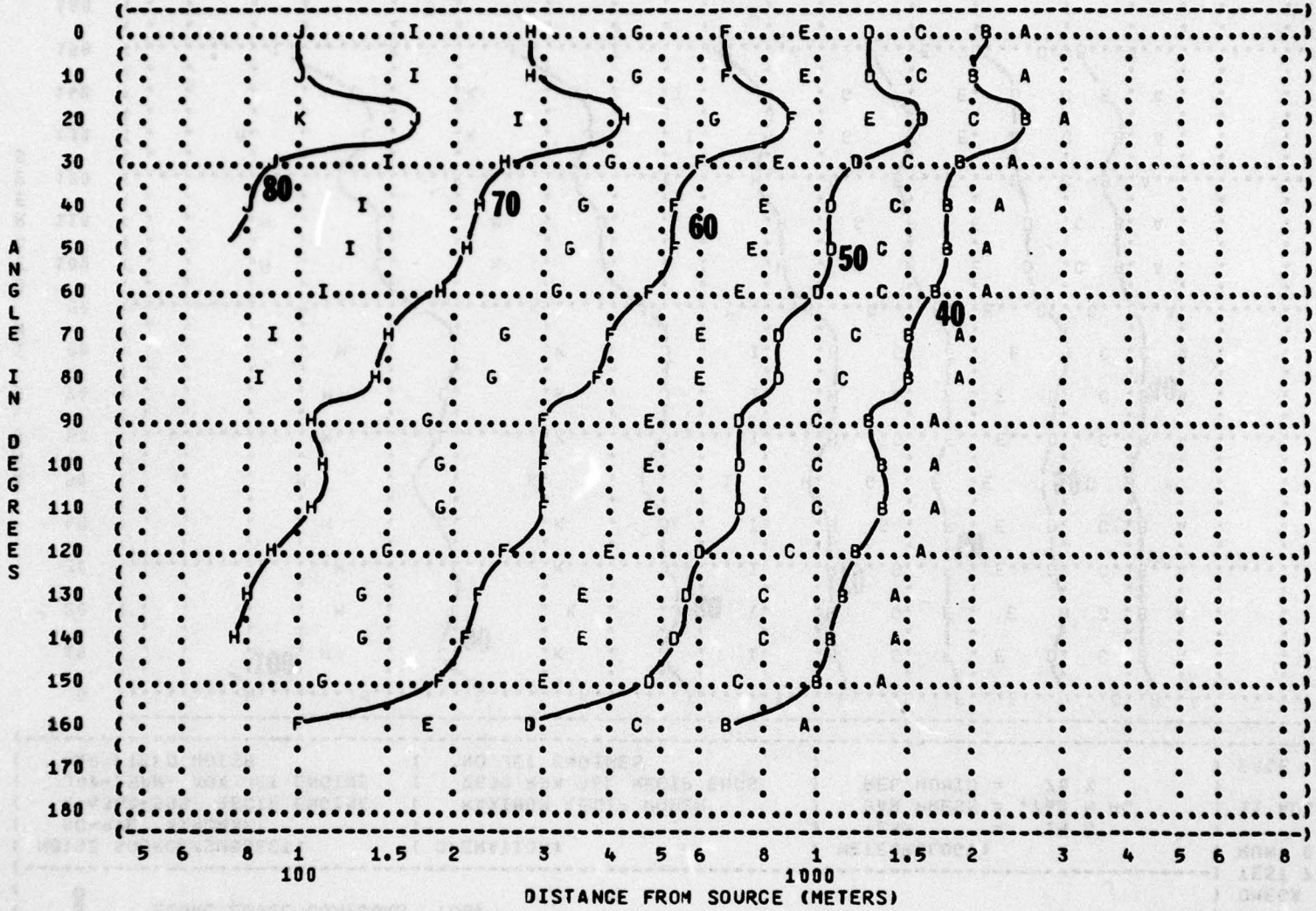


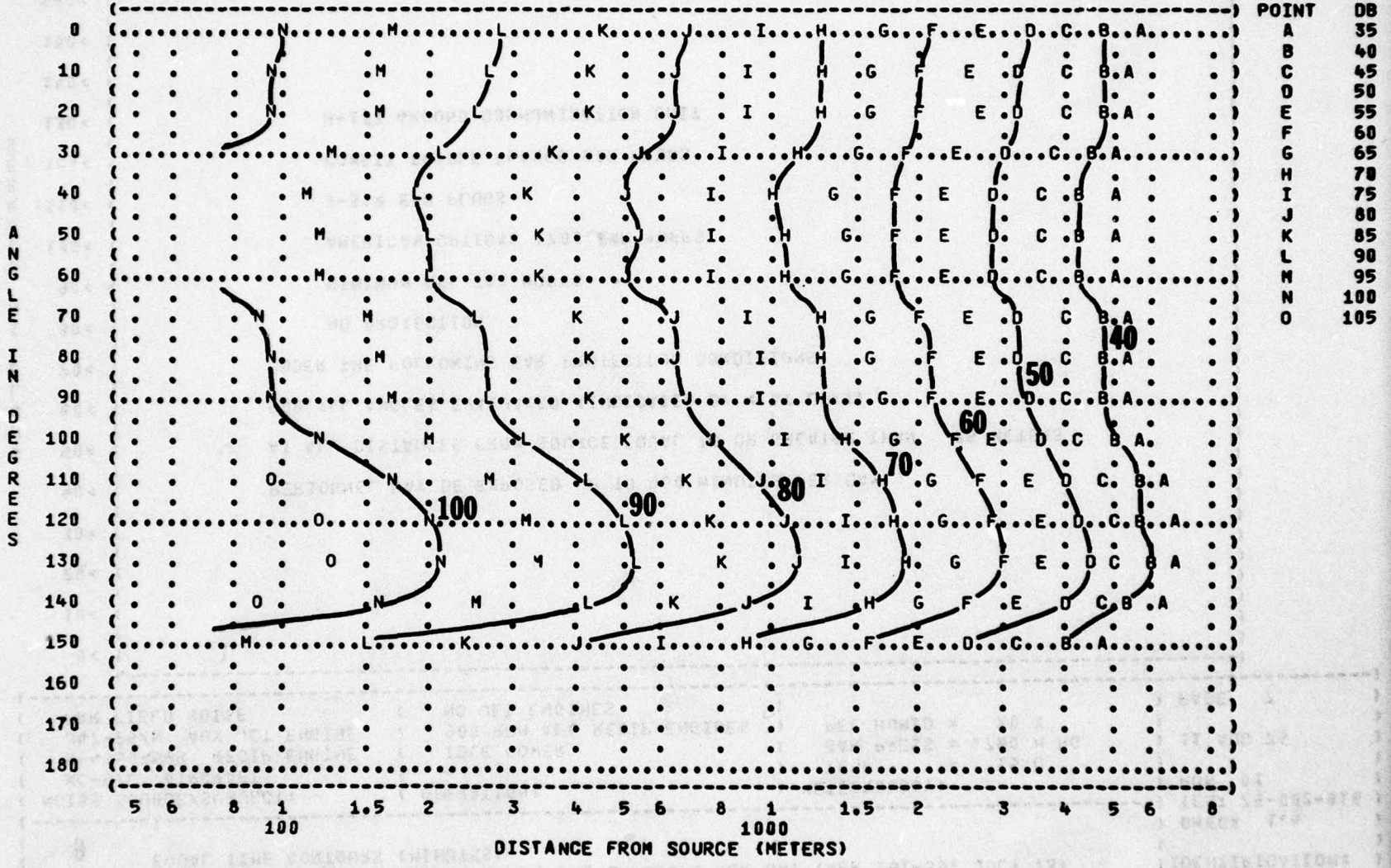
FIGURE 8: PREFERRED SPEECH INTERFERENCE LEVEL (PSIL) EQUAL LEVEL CONTOURS (DB)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 05
11 AUG 76
PAGE 17

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER, ALL ENGS
2650 RPM ALL RECIP ENGS
100% RPM BOTH AUX JET ENG

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %




| POINT | DB |
|---|---|
| A | 35 |
| B | 40 |
| C | 45 |
| D | 50 |
| E | 55 |
| F | 60 |
| G | 65 |
| H | 70 |
| I | 75 |
| J | 80 |
| K | 85 |
| L | 90 |
| M | 95 |
| N | 100 |
| O | 105 |

FIGURE 9: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 01
11 AUG 76
PAGE 7

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER
900 RPM ALL RECIP ENGINES
NO JET ENGINES

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

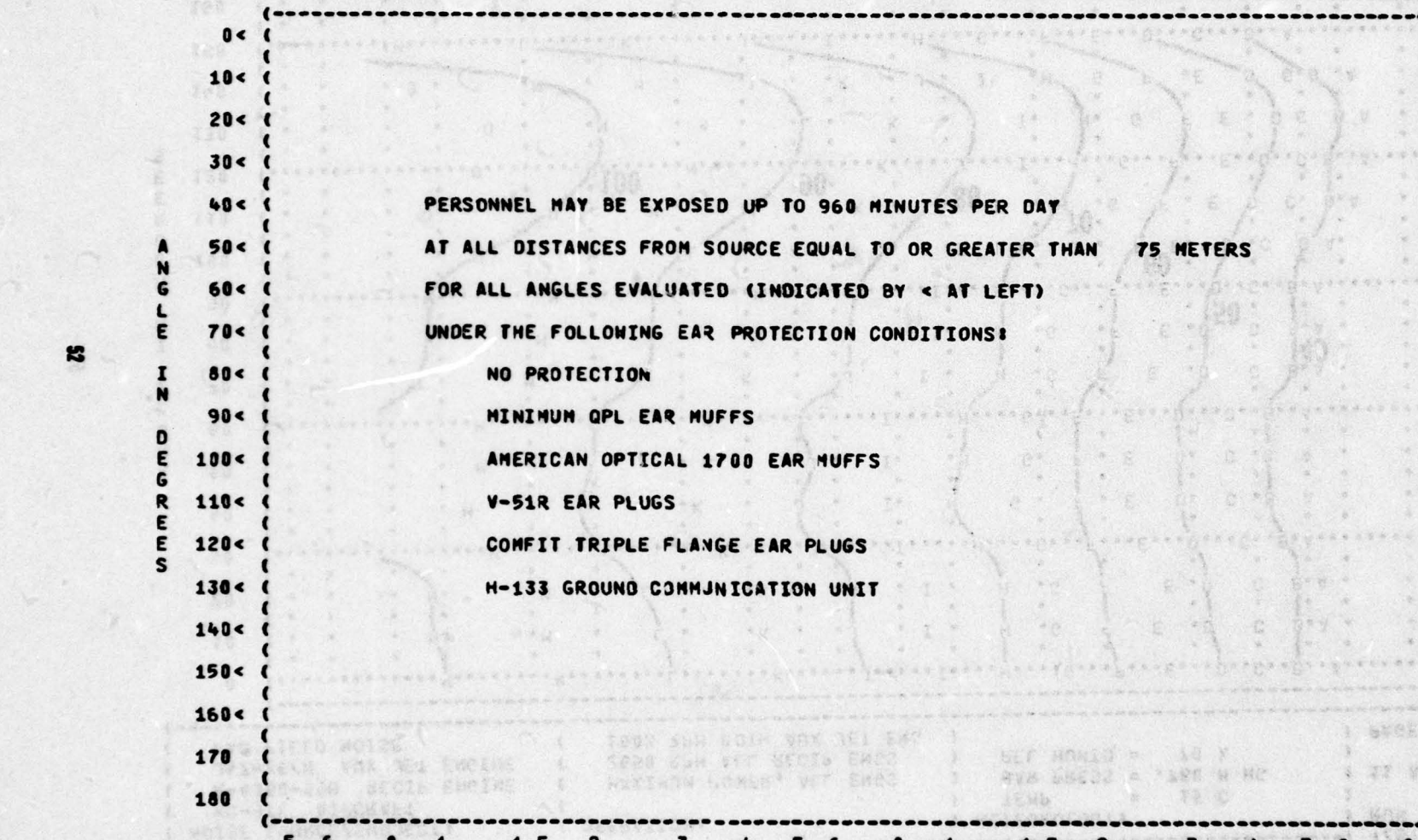


FIGURE 9: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
NO PROTECTION

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 02
11 AUG 76
PAGE 7

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-598 RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
POWER CHECK
2050 RPM ALL RECIP ENGS
NO JET ENGINES

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

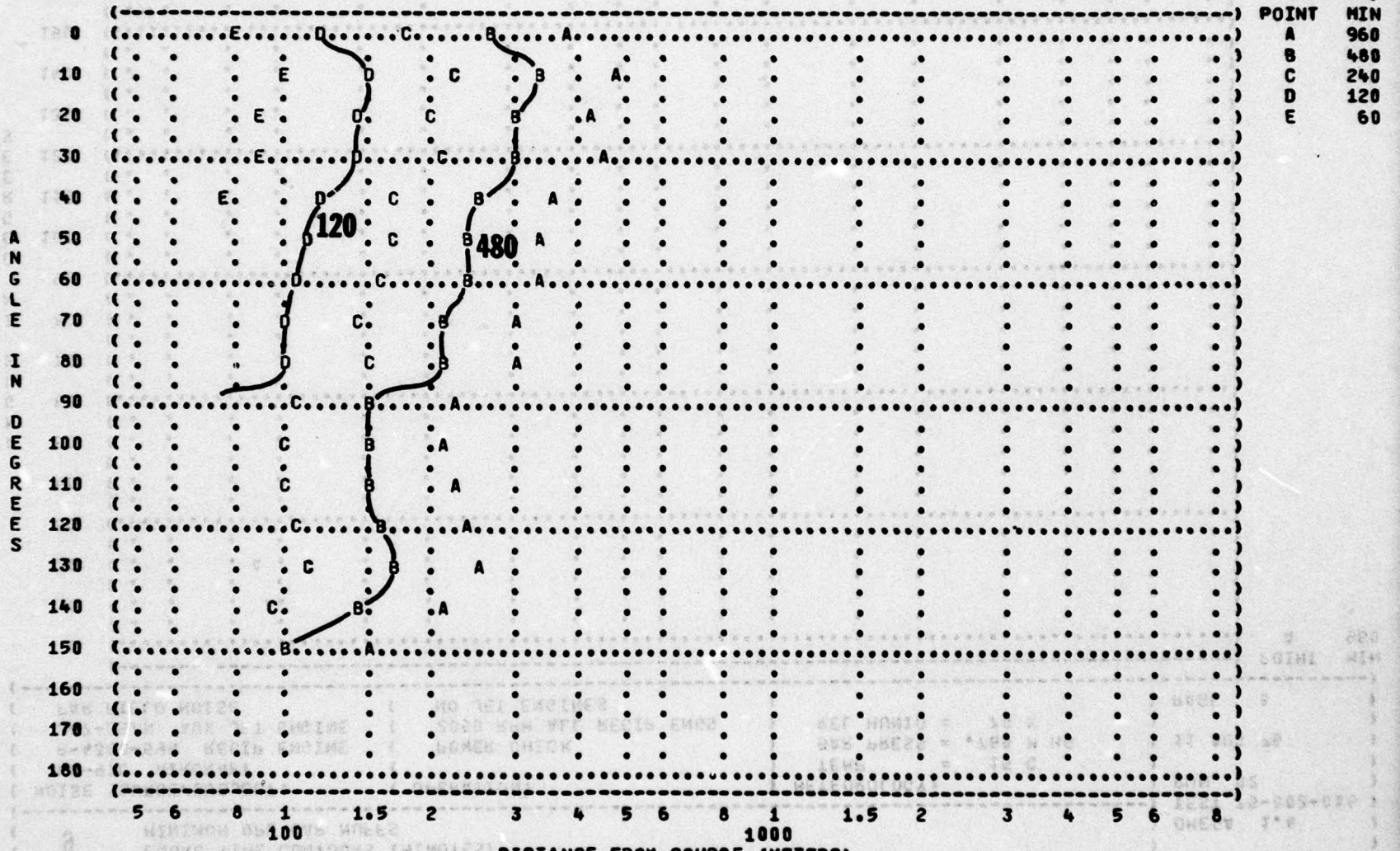


FIGURE 9: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
MINIMUM QPL EAR MUFFS

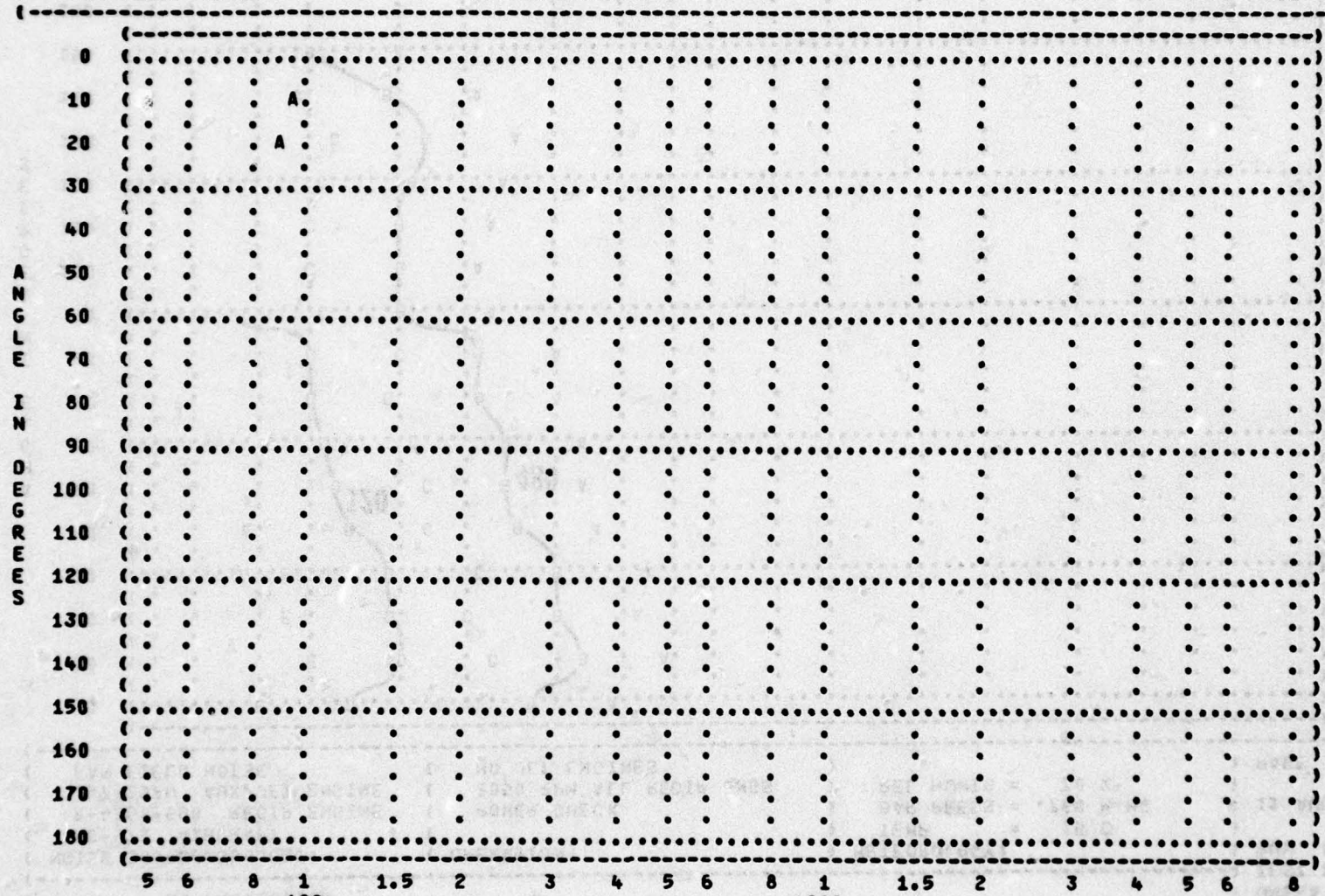
IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 02
11 AUG 76
PAGE 8

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
POWER CHECK
2050 RPM ALL RECIP ENGS
NO JET ENGINES

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

| POINT | MIN |
|---|---|
| A | 960 |



| FIGURE: 9 | MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)<br>EQUAL TIME CONTOURS (MINUTES) | IDENTIFICATION: |
|---|---|---|
| NOISE SOURCE/SUBJECT:<br>KC-97L AIRCRAFT<br>R-4360-59B RECIP ENGINE<br>J47-25/N AUX JET ENGINE<br>FAR FIELD NOISE | OPERATION:<br>POWER CHECK<br>2050 RPM ALL RECIP ENGS<br>NO JET ENGINES | METEOROLOGY:<br>TEMP = 15 C<br>BAR PRESS = .760 M HG<br>REL HUMID = 70 % |

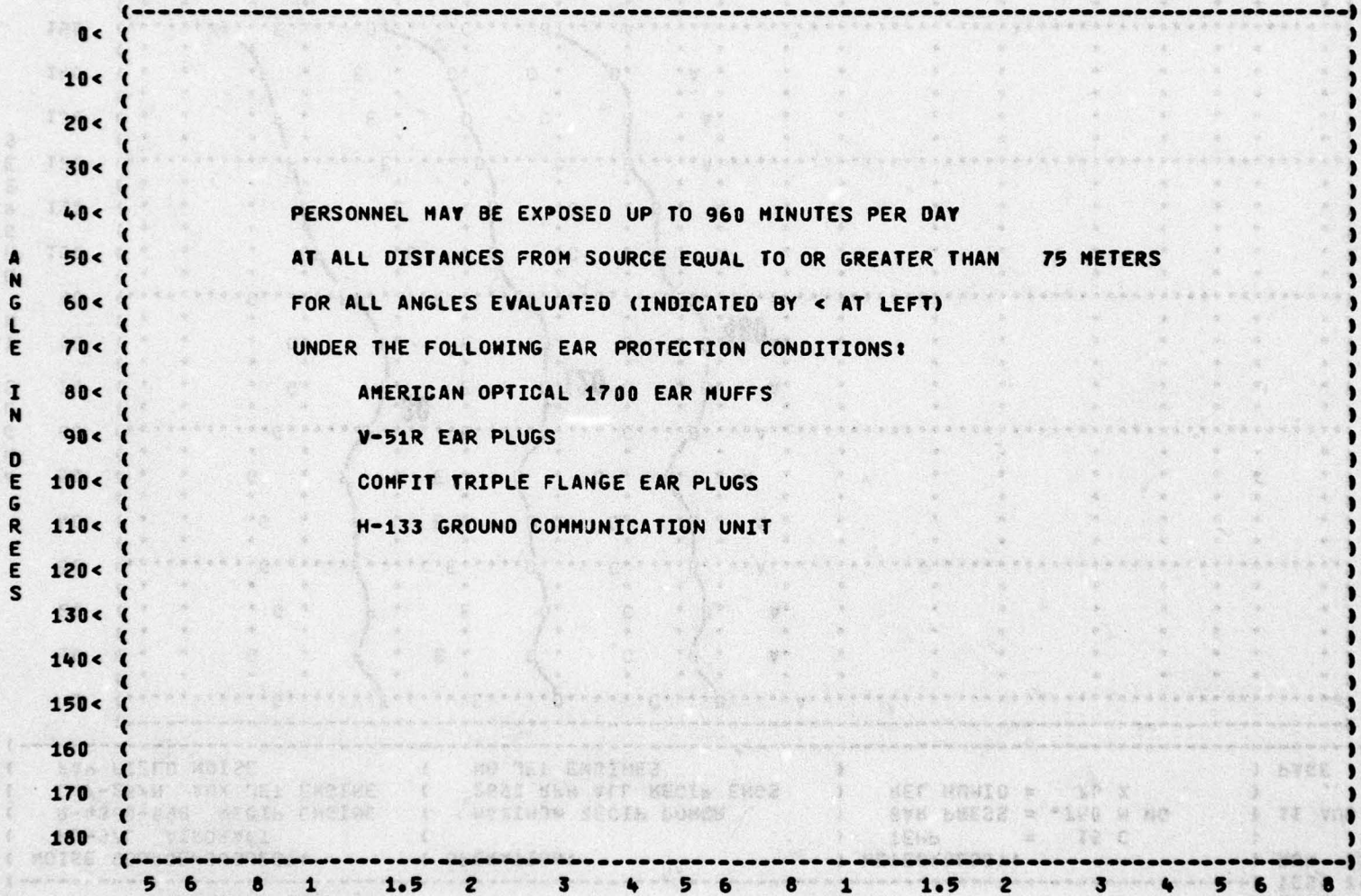


FIGURE 9: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
NO PROTECTION

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 03
11 AUG 76
PAGE 7

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-598 RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM RECIP POWER
2650 RPM ALL RECIP ENGS
NO JET ENGINES

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

| POINT | MIN |
|---|---|
| A | 960 |
| B | 480 |
| C | 240 |
| D | 120 |
| E | 60 |
| F | 30 |
| G | 15 |

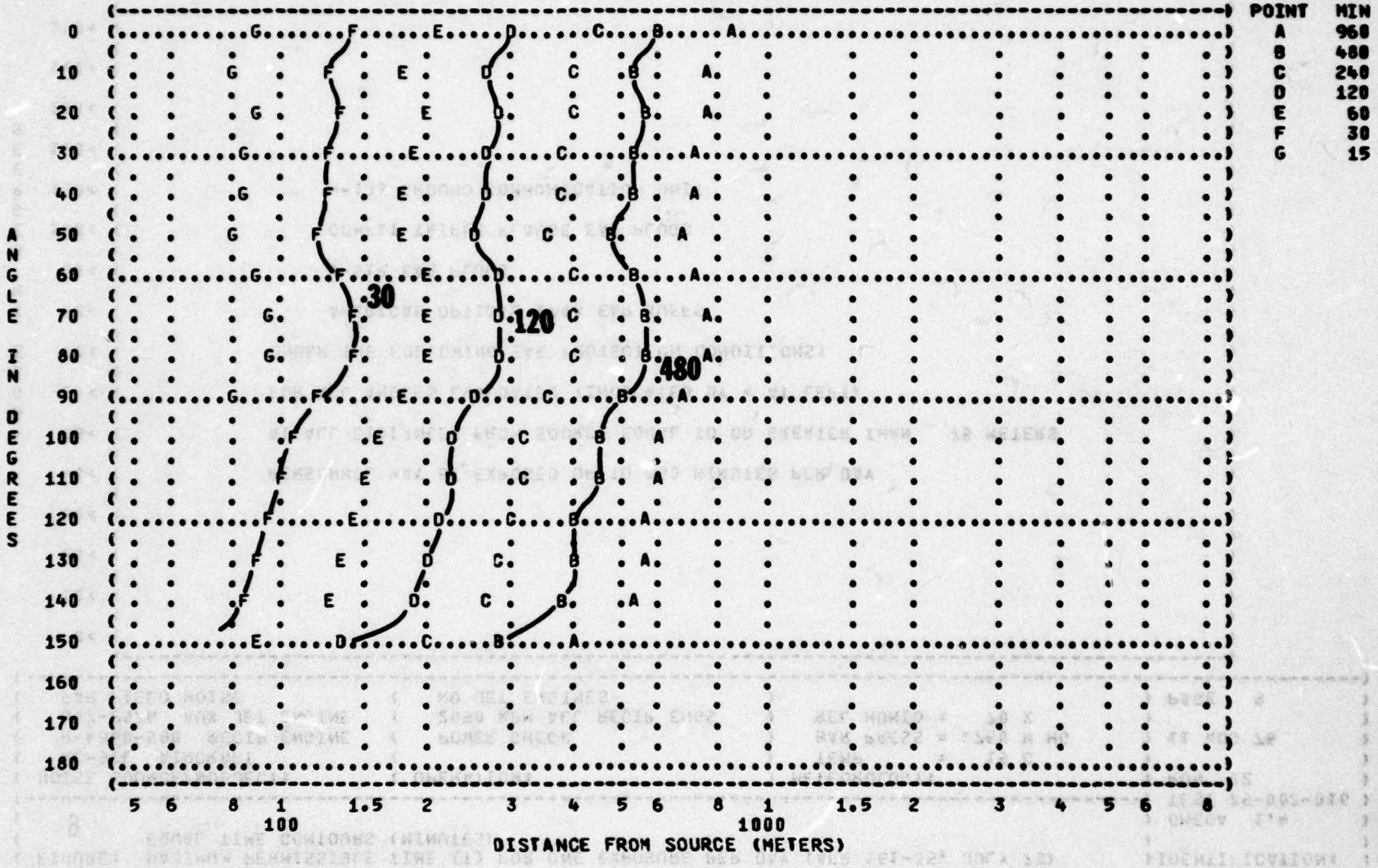


FIGURE 9: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
MINIMUM QPL EAR MUFFS

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 03
11 AUG 76
PAGE 8

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM RECIP POWER
2650 RPM ALL RECIP ENGS
NO JET ENGINES

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

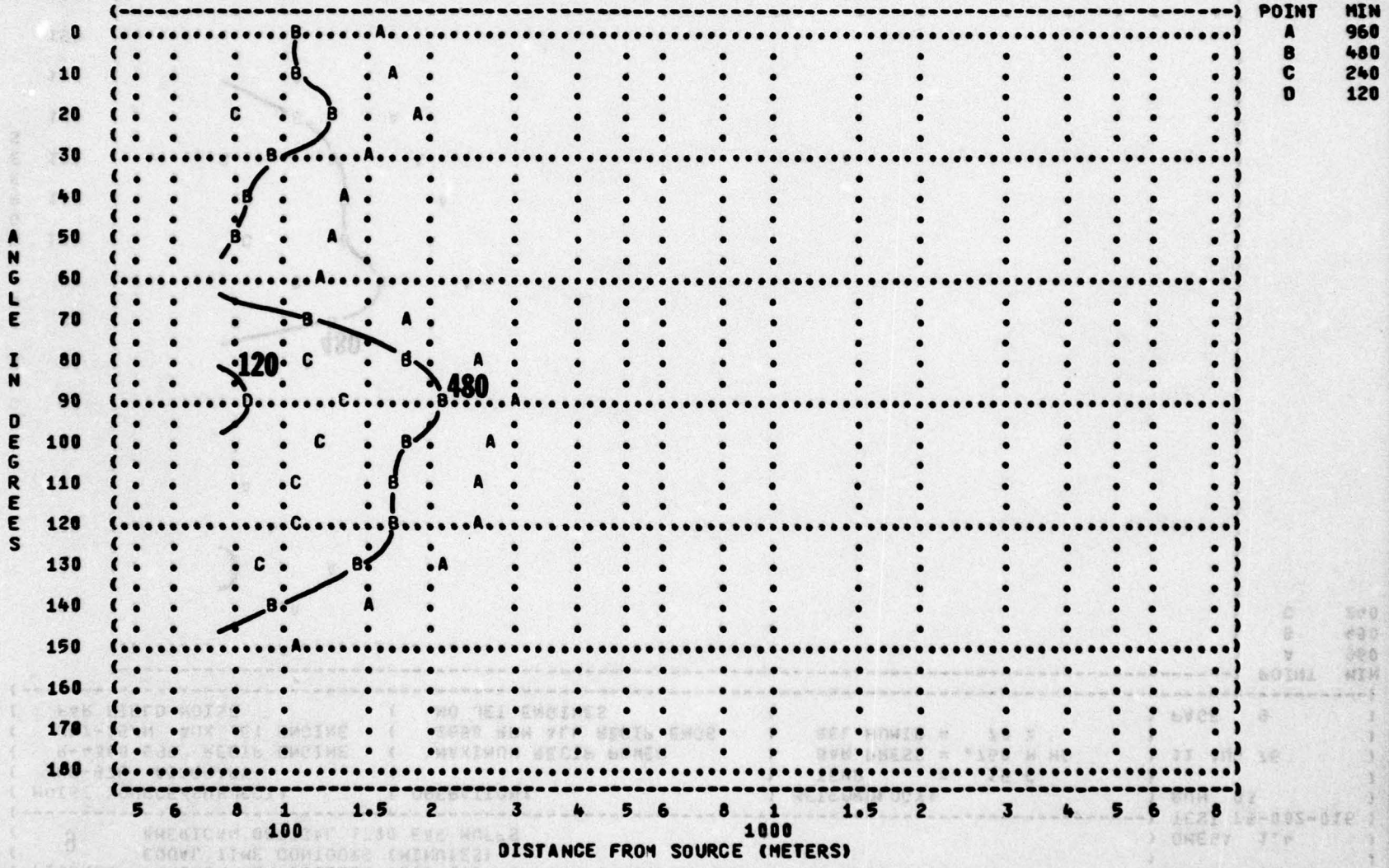


FIGURE 9: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
AMERICAN OPTICAL 1700 EAR MUFFS

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 03
11 AUG 76
PAGE 9

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM RECIP POWER
2650 RPM ALL RECIP ENGS
NO JET ENGINES

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

| POINT | MIN |
|---|---|
| A | 960 |
| B | 480 |
| C | 240 |

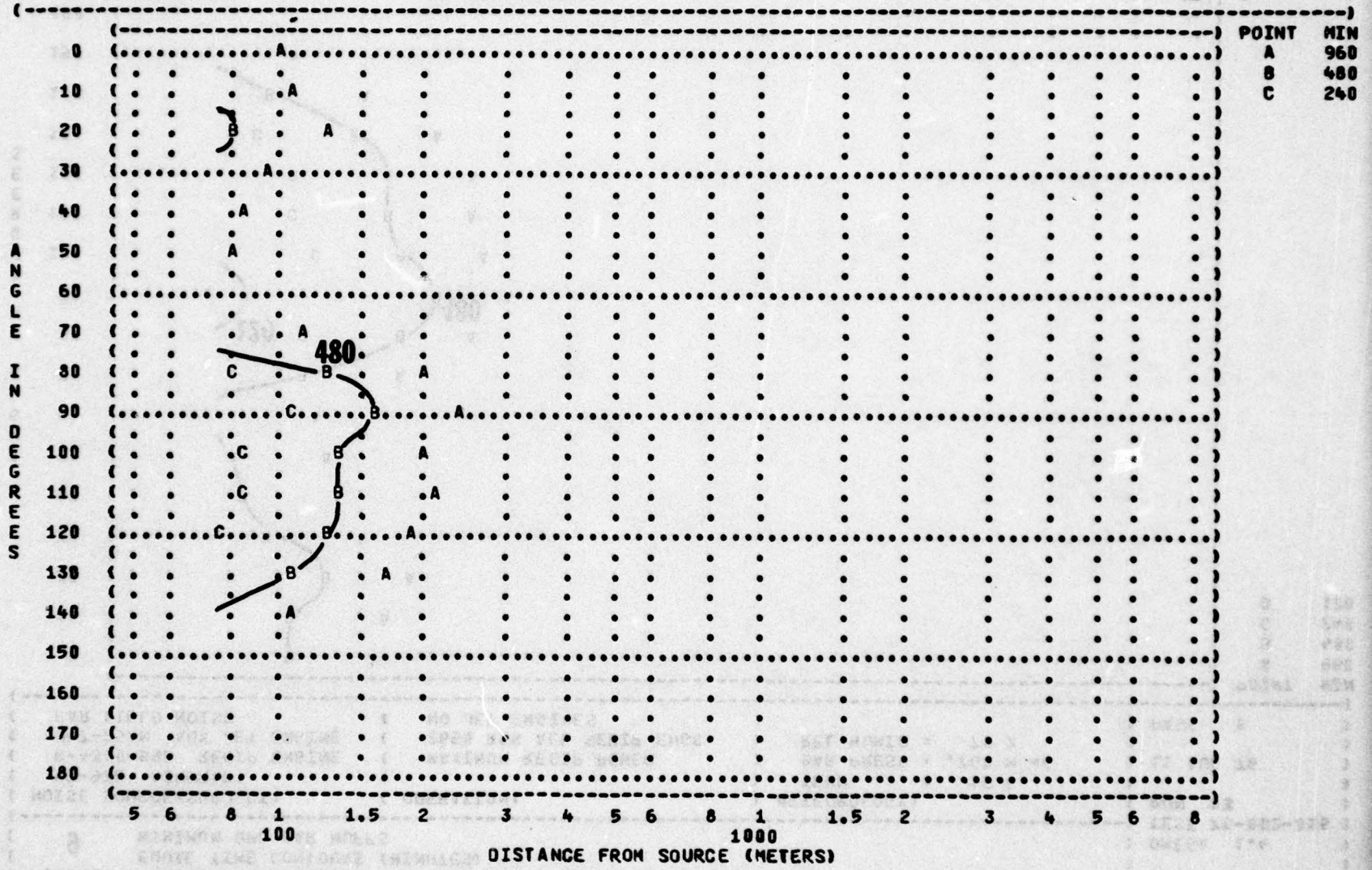


FIGURE 9: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
V-51R EAR PLUGS

IDENTIFICATION:
OMEGA 1.4
TEST 75-082-016
RUN 03
11 AUG 76
PAGE 18

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM RECIP POWER
2650 RPM ALL RECIP ENGS
NO JET ENGINES

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

| POINT | MIN |
|---|---|
| A | 960 |

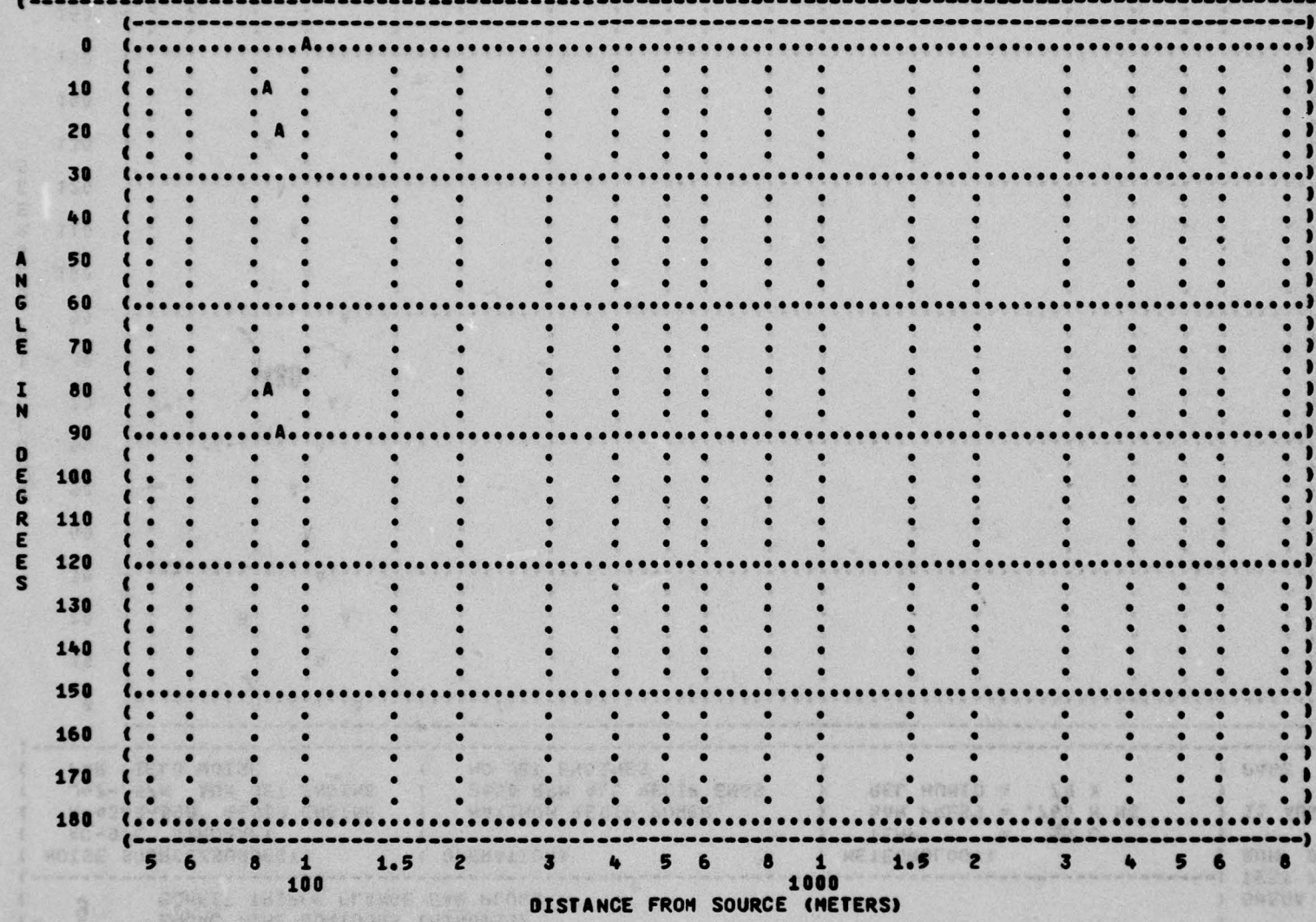


FIGURE 9: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
COMFIT TRIPLE FLANGE EAR PLUGS

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM RECIP POWER
2650 RPM ALL RECIP ENGS
NO JET ENGINES

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-082-016
RUN 03
11 AUG 76
PAGE 11

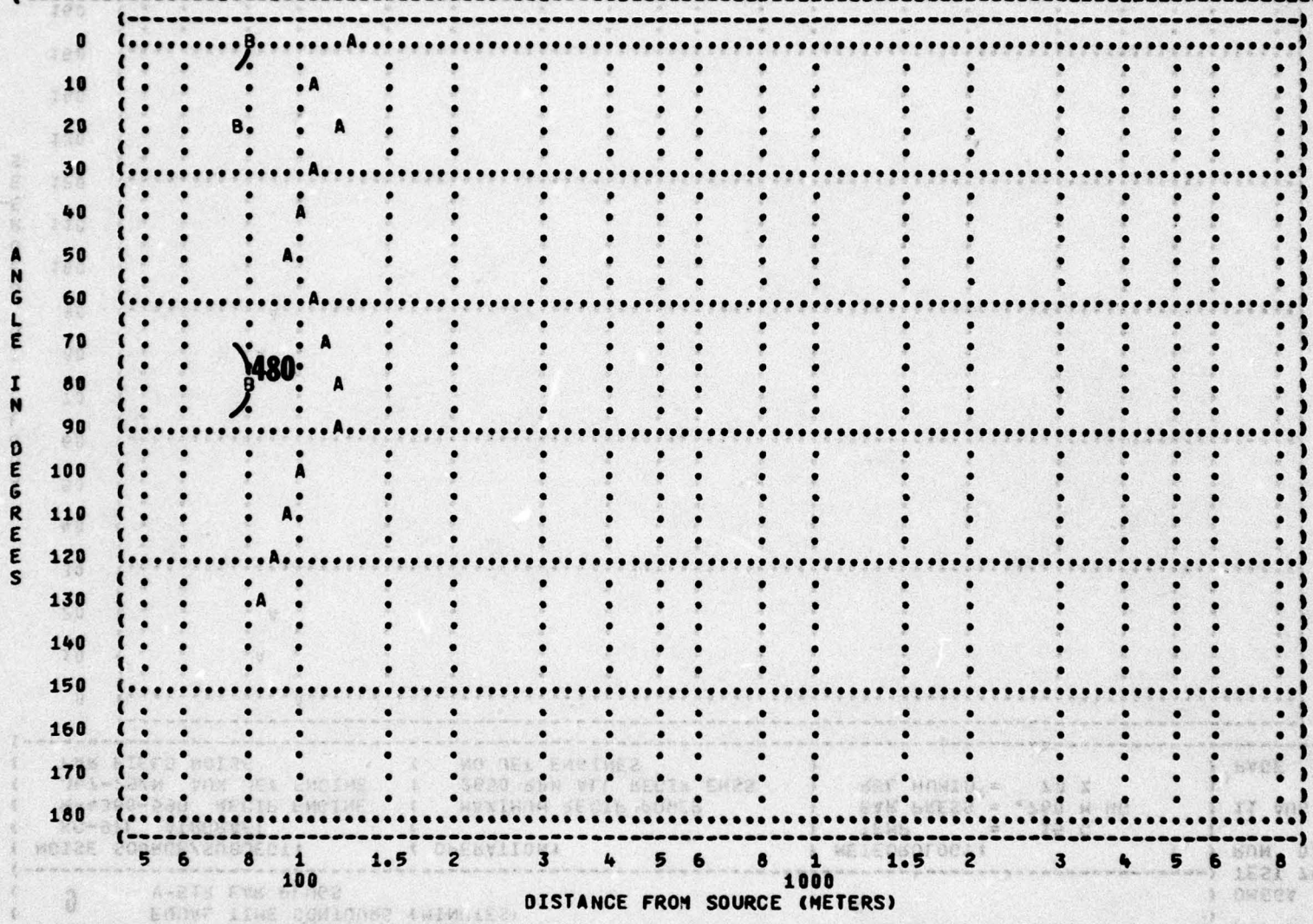


FIGURE 9: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
H-133 GROUND COMMUNICATION UNIT

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 03
11 AUG 76
PAGE 12

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-598 RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM RECIP POWER
2650 RPM ALL RECIP ENGS
NO JET ENGINES

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

| POINT | MIN |
|---|---|
| A | 960 |
| B | 480 |

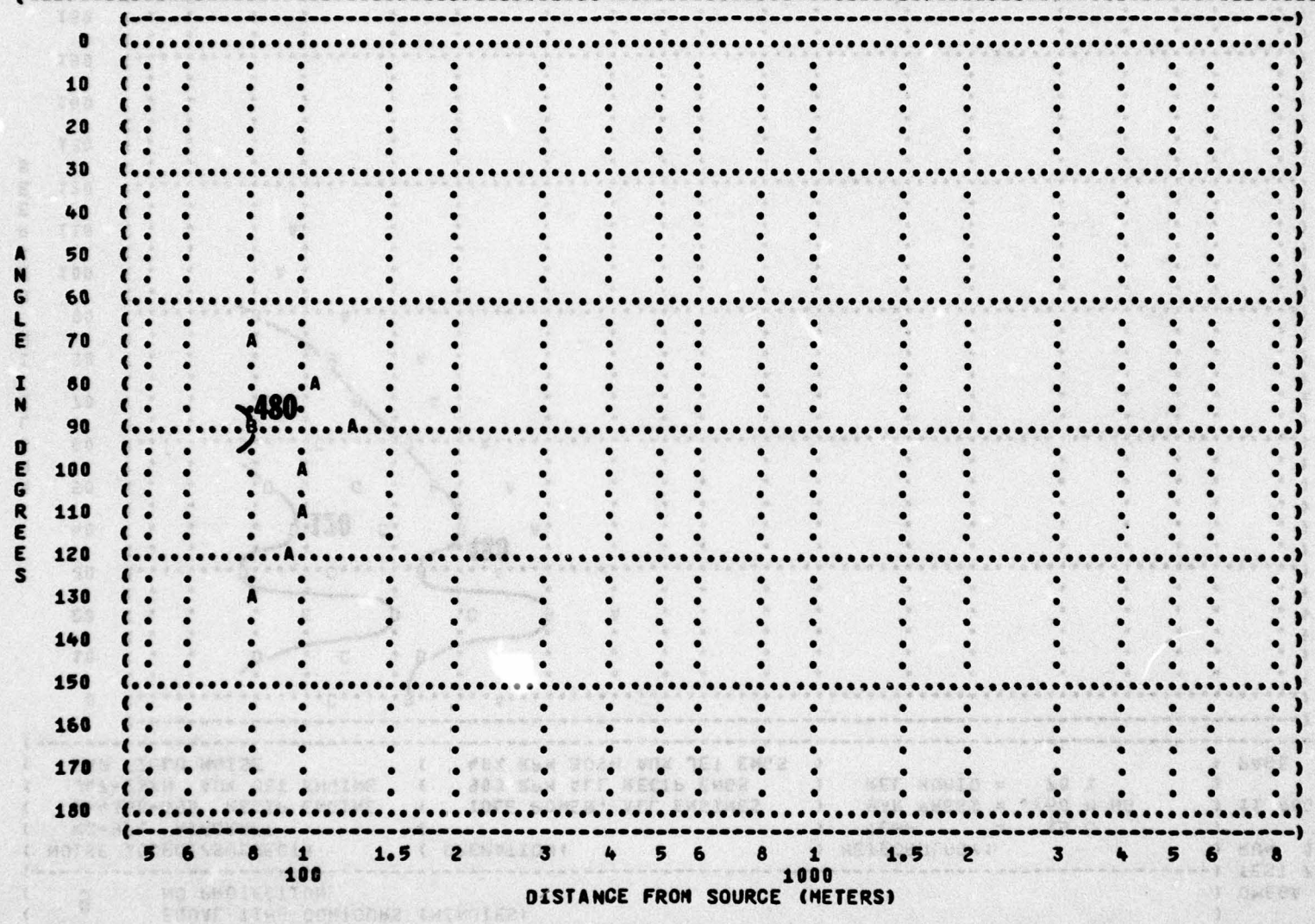


FIGURE: 9

MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
NO PROTECTION

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 04
11 AUG 76
PAGE 7

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER, ALL ENGINES
900 RPM ALL RECIP ENGS
40% RPM BOTH AUX JET ENGS

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

| POINT | MIN |
|---|---|
| A | 960 |
| B | 480 |
| C | 240 |
| D | 120 |
| E | 60 |

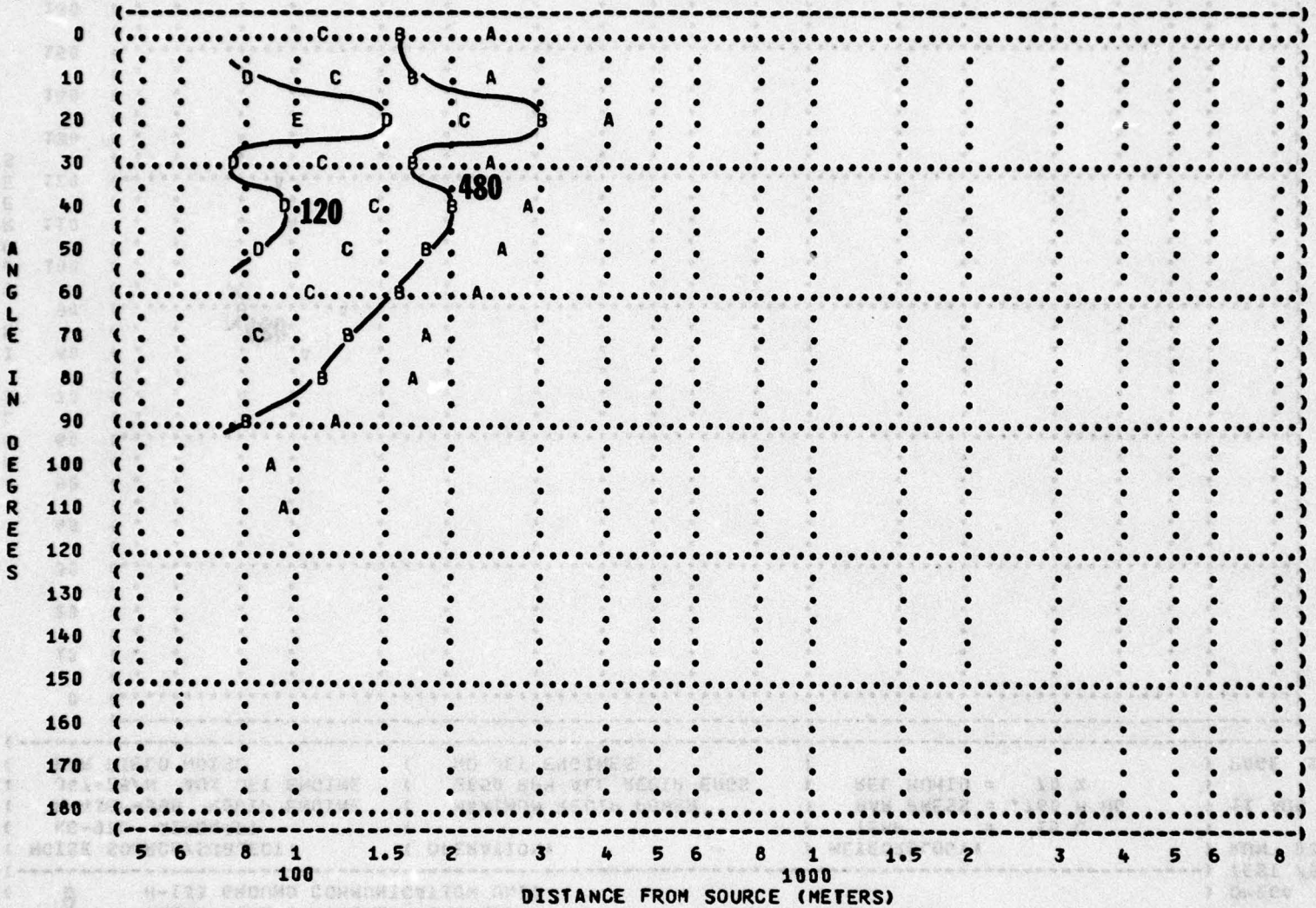


FIGURE 9: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 04
11 AUG 76
PAGE 8

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-598 RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER, ALL ENGINES
900 RPM ALL RECIP ENGS
40% RPM BOTH AUX JET ENGS

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

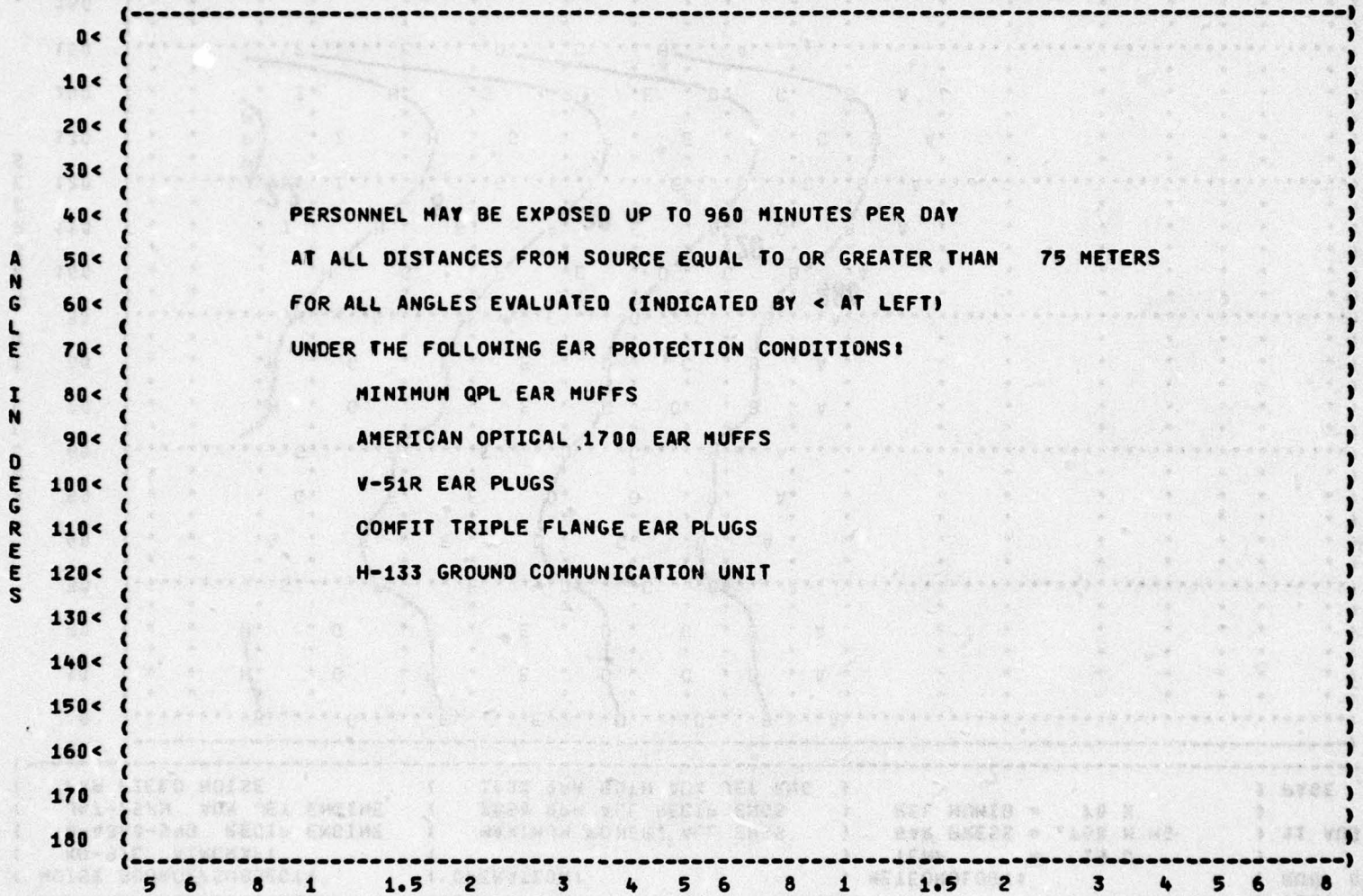


FIGURE 9: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
NO PROTECTION

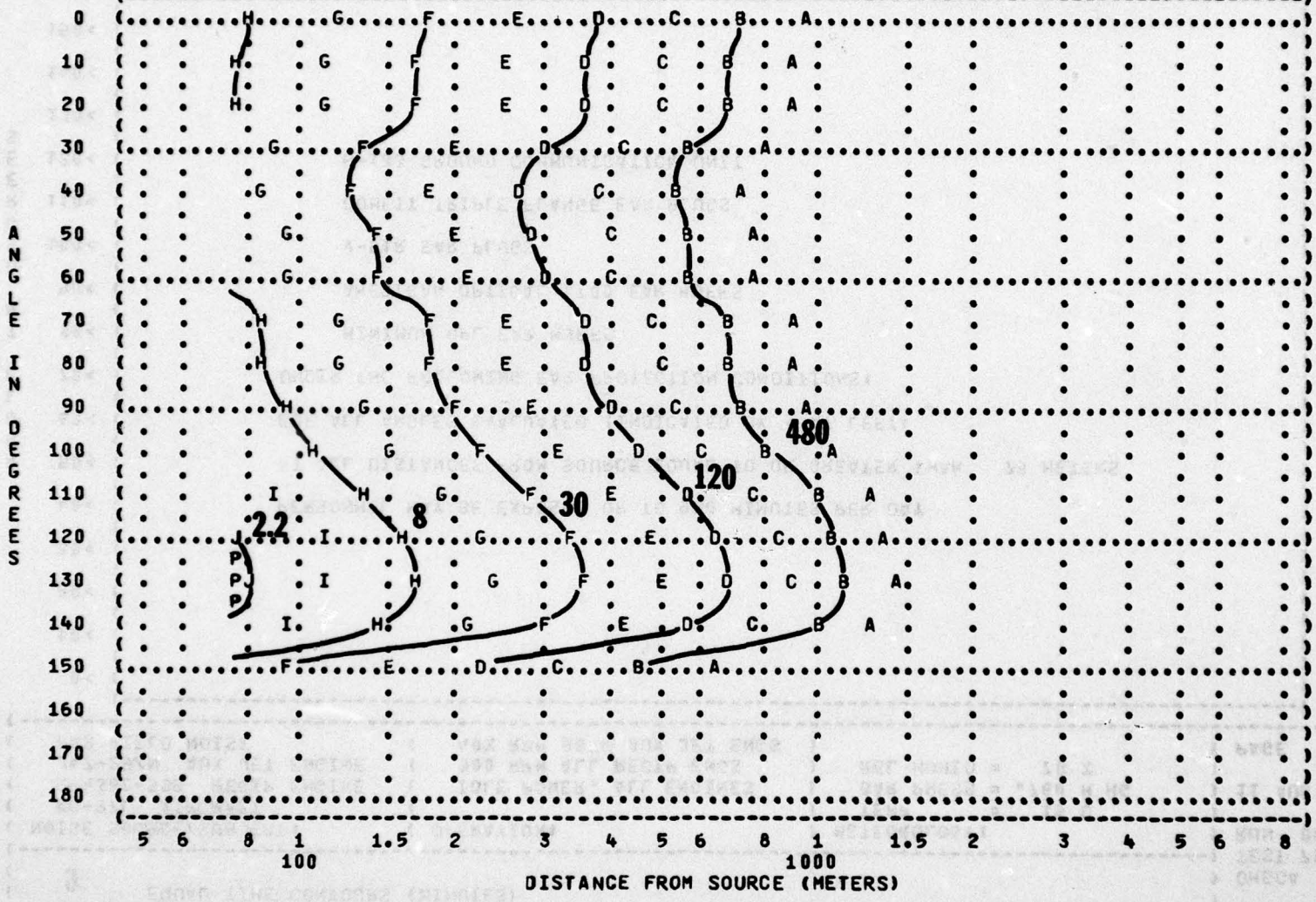
IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 05
11 AUG 76
PAGE 7

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER, ALL ENGS
2650 RPM ALL RECIP ENGS
100% RPM BOTH AUX JET ENG

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

| POINT | MIN |
|---|---|
| A | 960 |
| B | 480 |
| C | 240 |
| D | 120 |
| E | 60 |
| F | 30 |
| G | 15 |
| H | 8 |
| I | 4 |
| J | 2.2 |




P ADDITIONAL EAR PROTECTION REQUIRED.

FIGURE 9: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
MINIMUM QPL EAR MUFFS

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER, ALL ENGS
2650 RPM ALL RECIP ENGS
100% RPM BOTH AUX JET ENG

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-082-016
RUN 05
11 AUG 76
PAGE 8

| POINT | MIN |
|---|---|
| A | 960 |
| B | 480 |
| C | 240 |
| D | 120 |
| E | 60 |
| F | 30 |

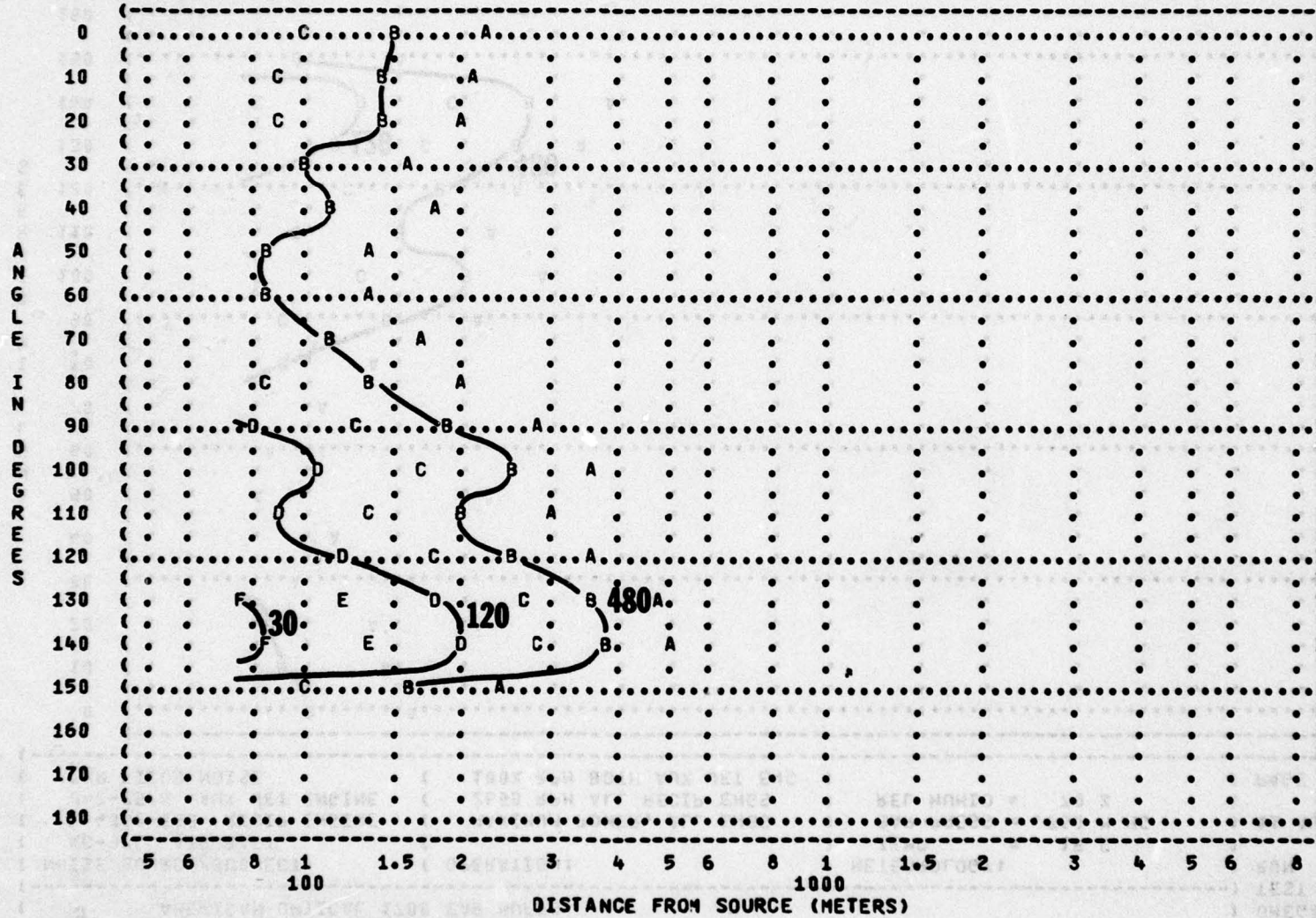


FIGURE 9: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
AMERICAN OPTICAL 1700 EAR MUFFS

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 05
11 AUG 76
PAGE 9

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER, ALL ENGS
2650 RPM ALL RECIP ENGS
100% RPM BOTH AUX JET ENG

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

| POINT | MIN |
|---|---|
| A | 960 |
| B | 480 |
| C | 240 |
| D | 120 |
| E | 60 |

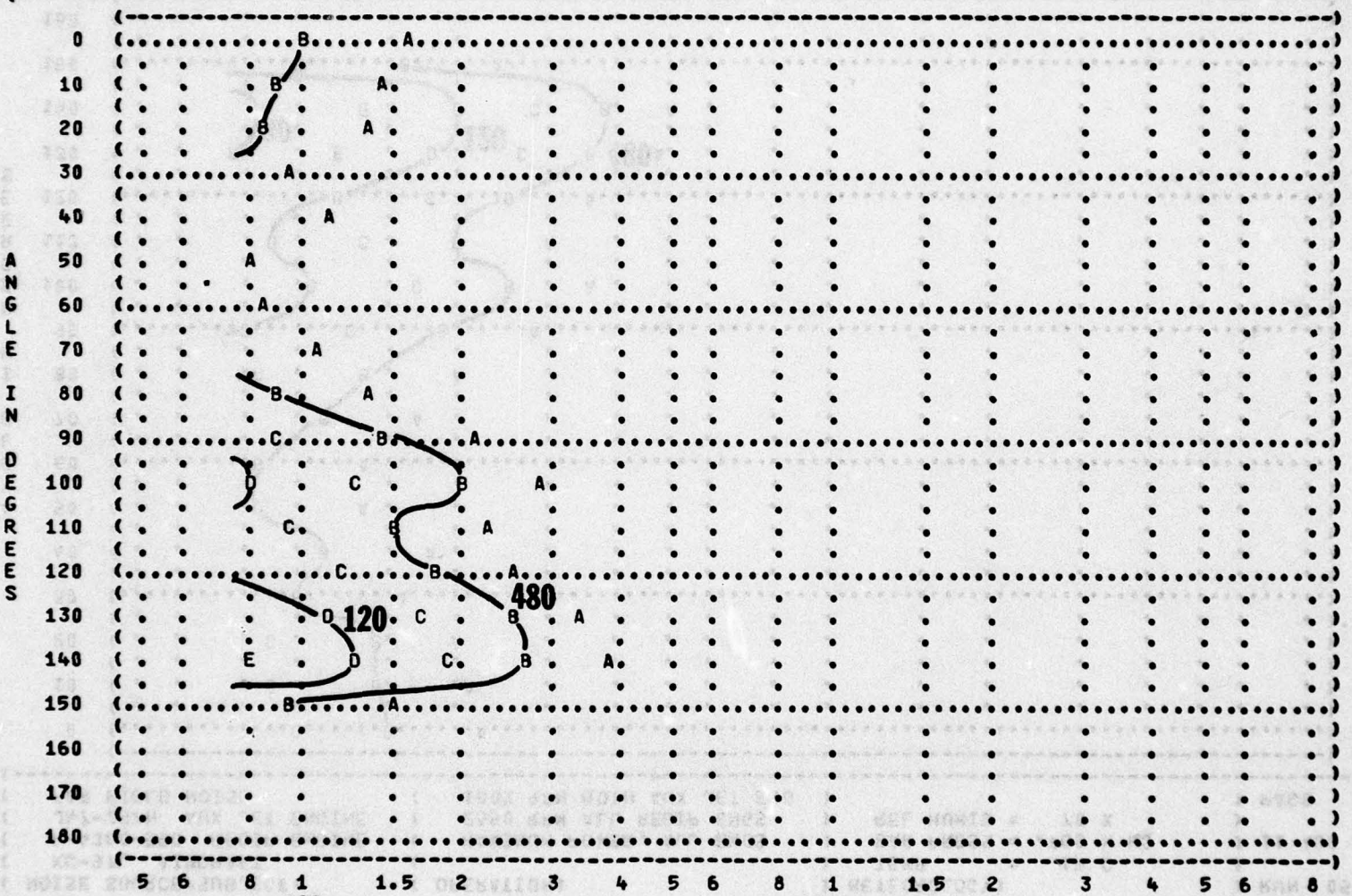


FIGURE 9: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
V-51R EAR PLUGS

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER, ALL ENGS
2650 RPM ALL RECIP ENGS
100% RPM BOTH AUX JET ENG

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 05

11 AUG 76

PAGE 10

| POINT | MIN |
|---|---|
| A | 960 |
| B | 480 |
| C | 240 |
| D | 120 |

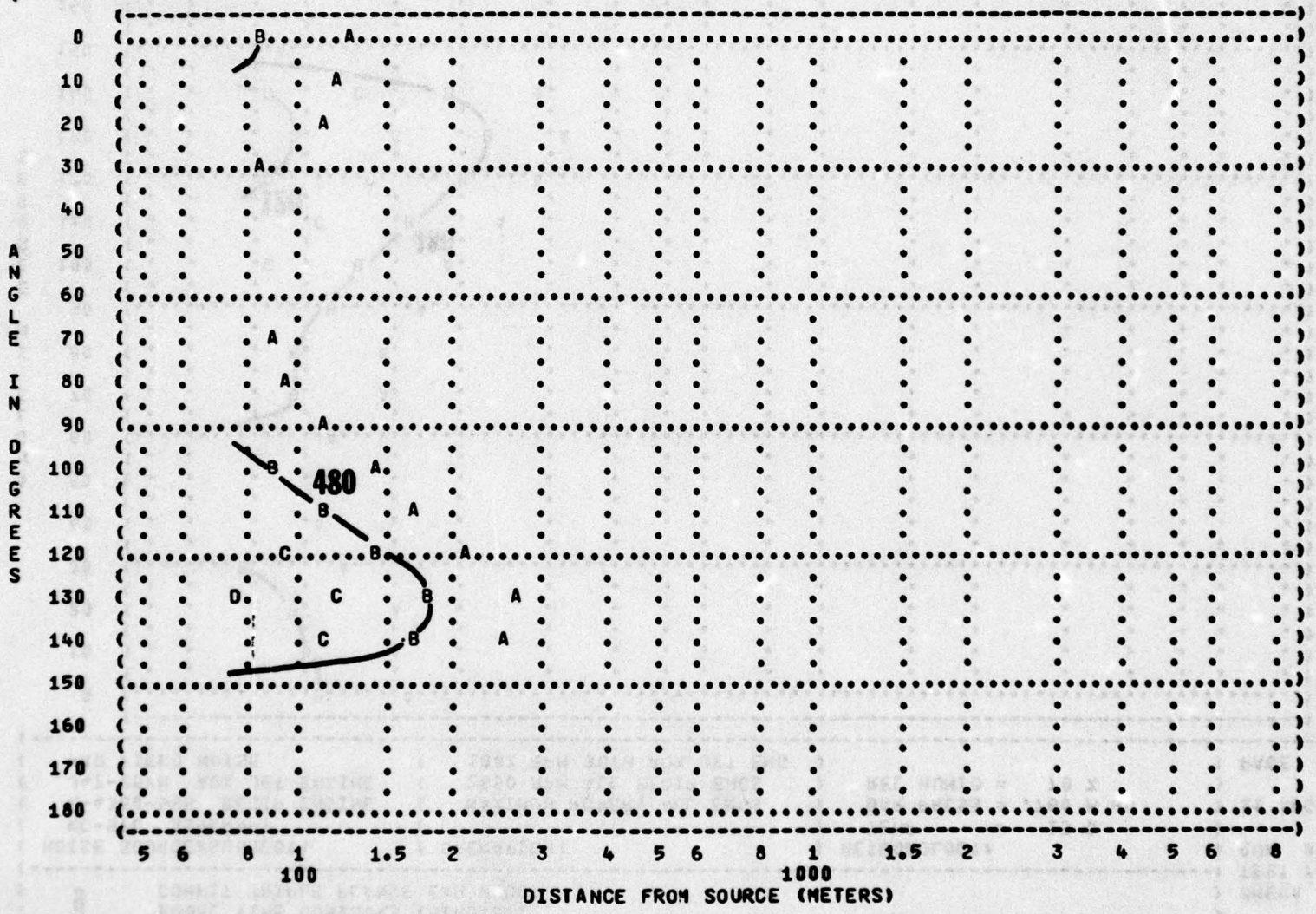


FIGURE 9: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
COMFIT TRIPLE FLANGE EAR PLUGS

IDENTIFICATIONS:
OMEGA 1.4
TEST 75-002-016
RUN 05
11 AUG 76
PAGE 11

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER, ALL ENGS
2650 RPM ALL RECIP ENGS
100% RPM BOTH AUX JET ENG

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

| POINT | MIN |
|---|---|
| A | 960 |
| B | 480 |
| C | 240 |
| D | 120 |

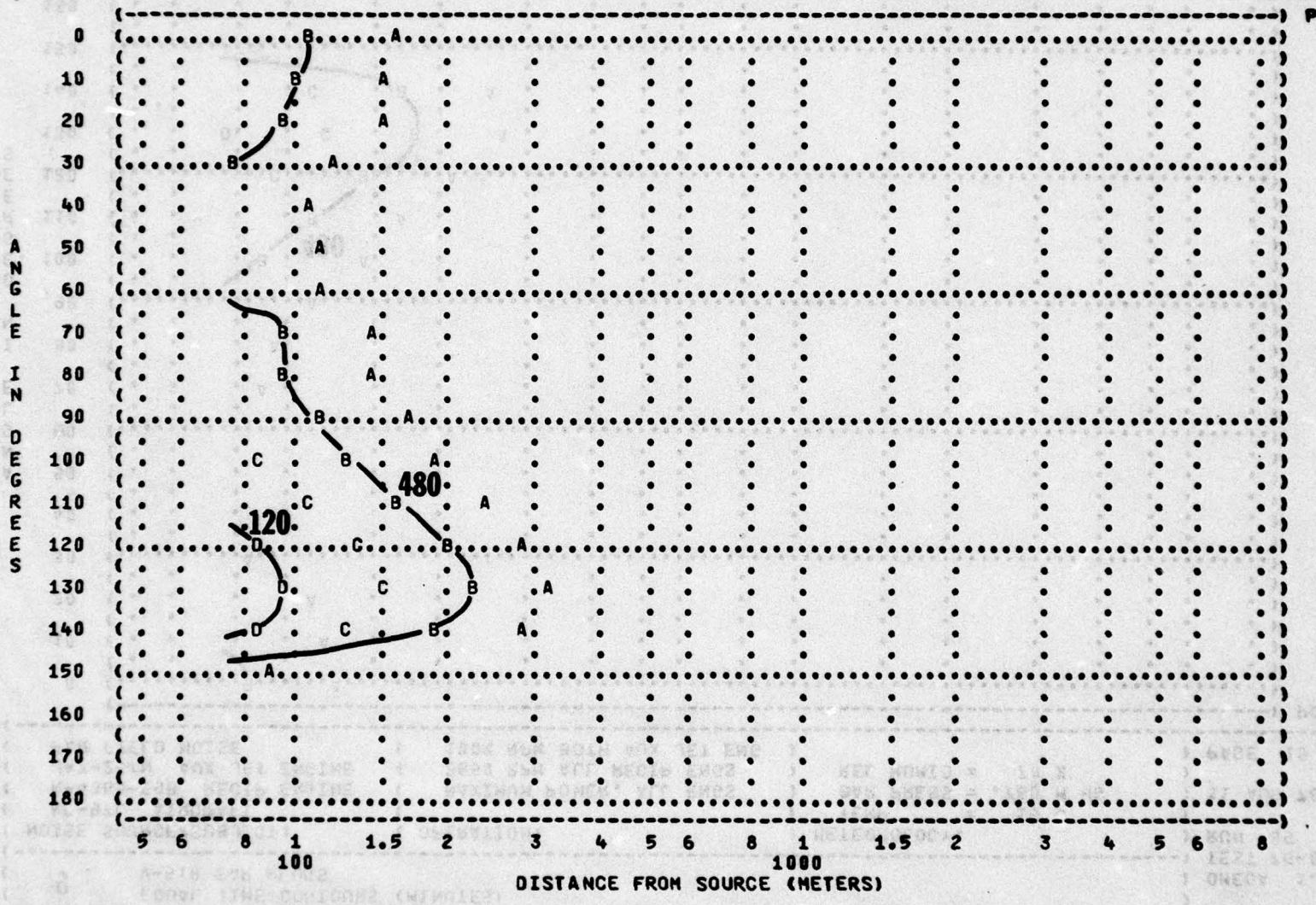


FIGURE 9: MAXIMUM PERMISSIBLE TIME (T) FOR ONE EXPOSURE PER DAY (AFR 161-35, JULY 73)
EQUAL TIME CONTOURS (MINUTES)
H-133 GROUND COMMUNICATION UNIT

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER, ALL ENGS
2650 RPM ALL RECIP ENGS
100% RPM BOTH AUX JET ENG

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 05
11 AUG 76
PAGE 12

| POINT | MIN |
|---|---|
| A | 960 |
| B | 480 |
| C | 240 |

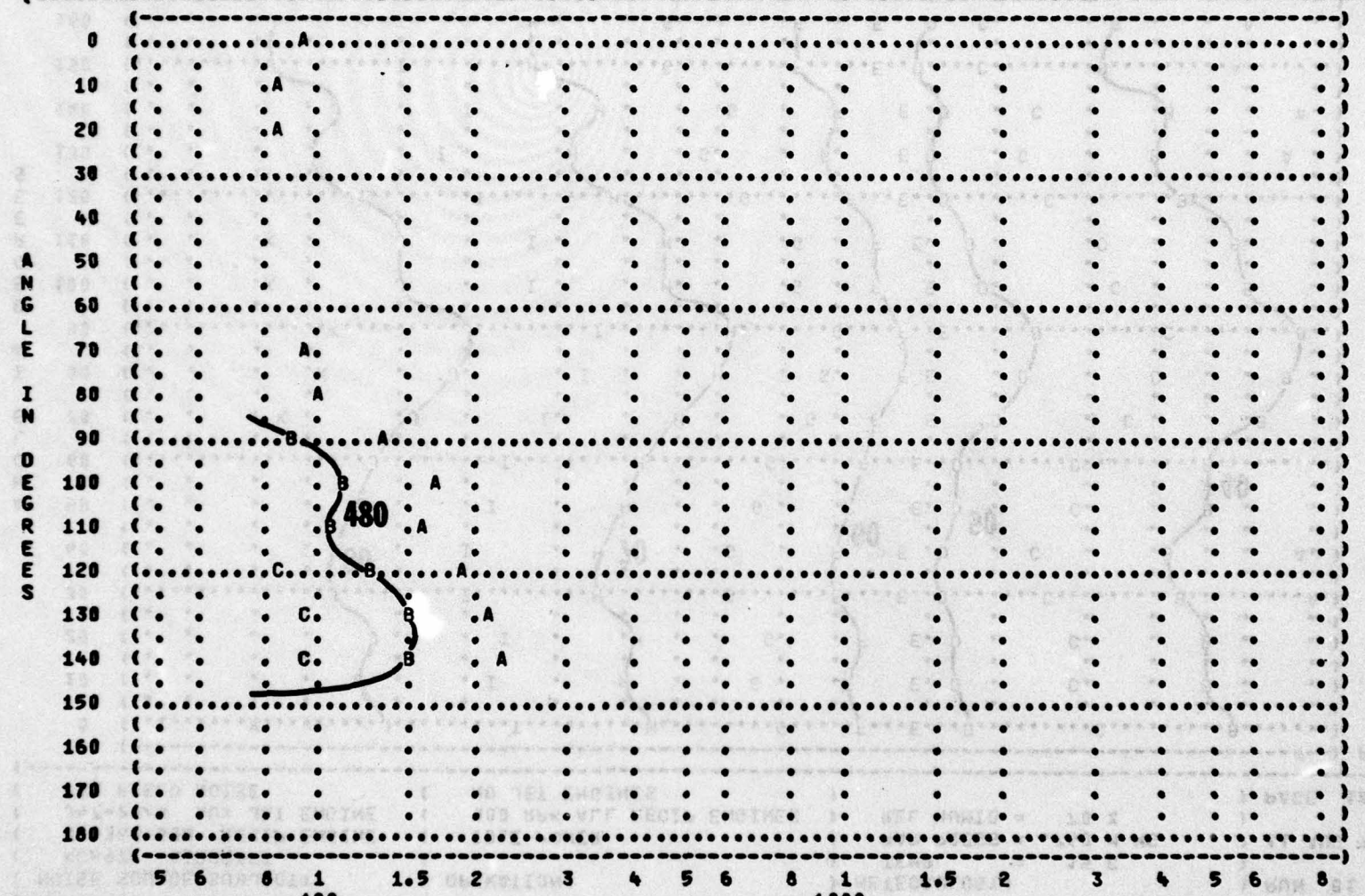


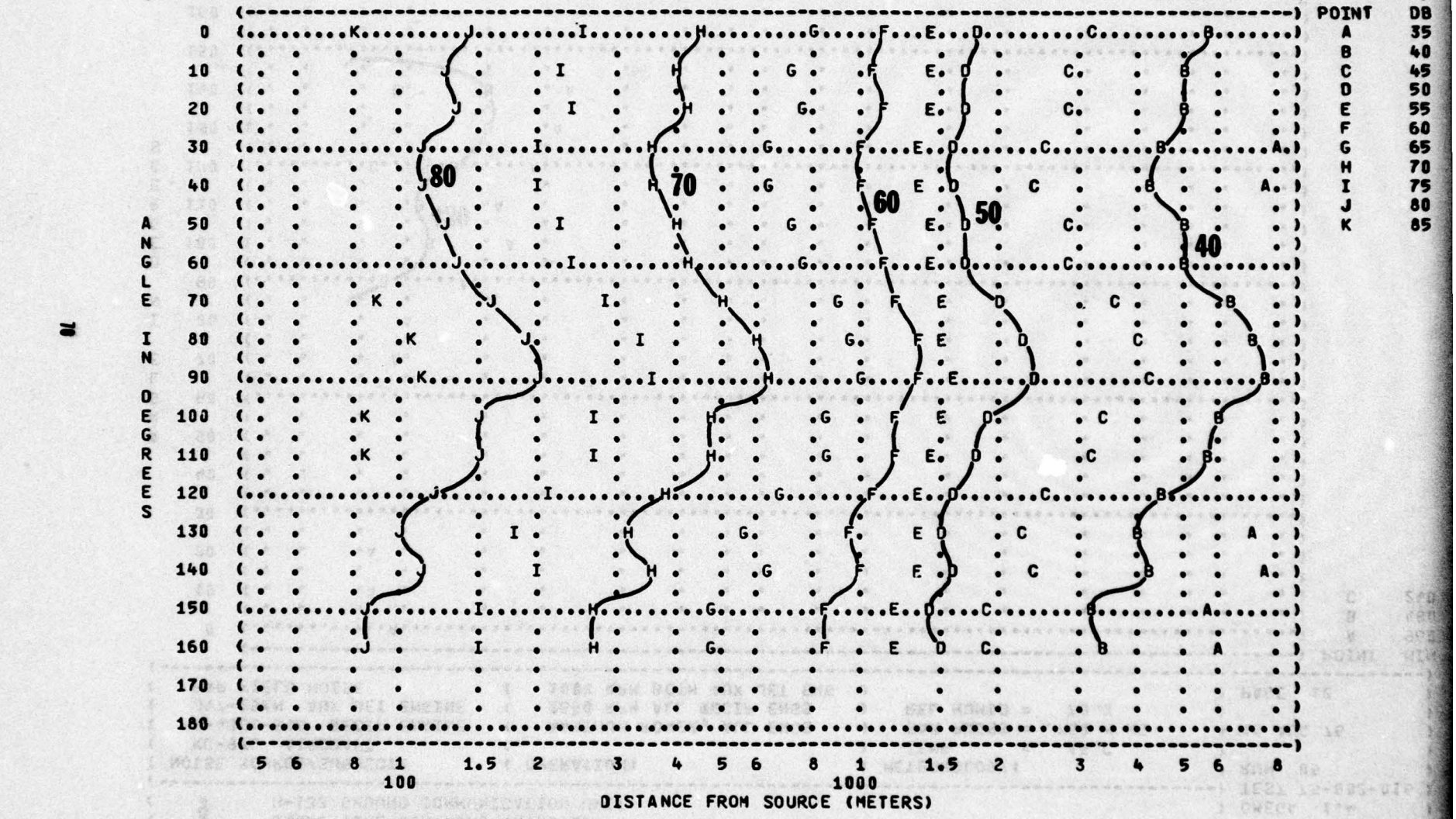
FIGURE 10: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 31.5 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER
900 RPM ALL RECIP ENGINES
NO JET ENGINES

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 01
11 AUG 76
PAGE 18




| POINT | DB |
|---|---|
| A | 35 |
| B | 40 |
| C | 45 |
| D | 50 |
| E | 55 |
| F | 60 |
| G | 65 |
| H | 70 |
| I | 75 |
| J | 80 |
| K | 85 |

FIGURE: 10

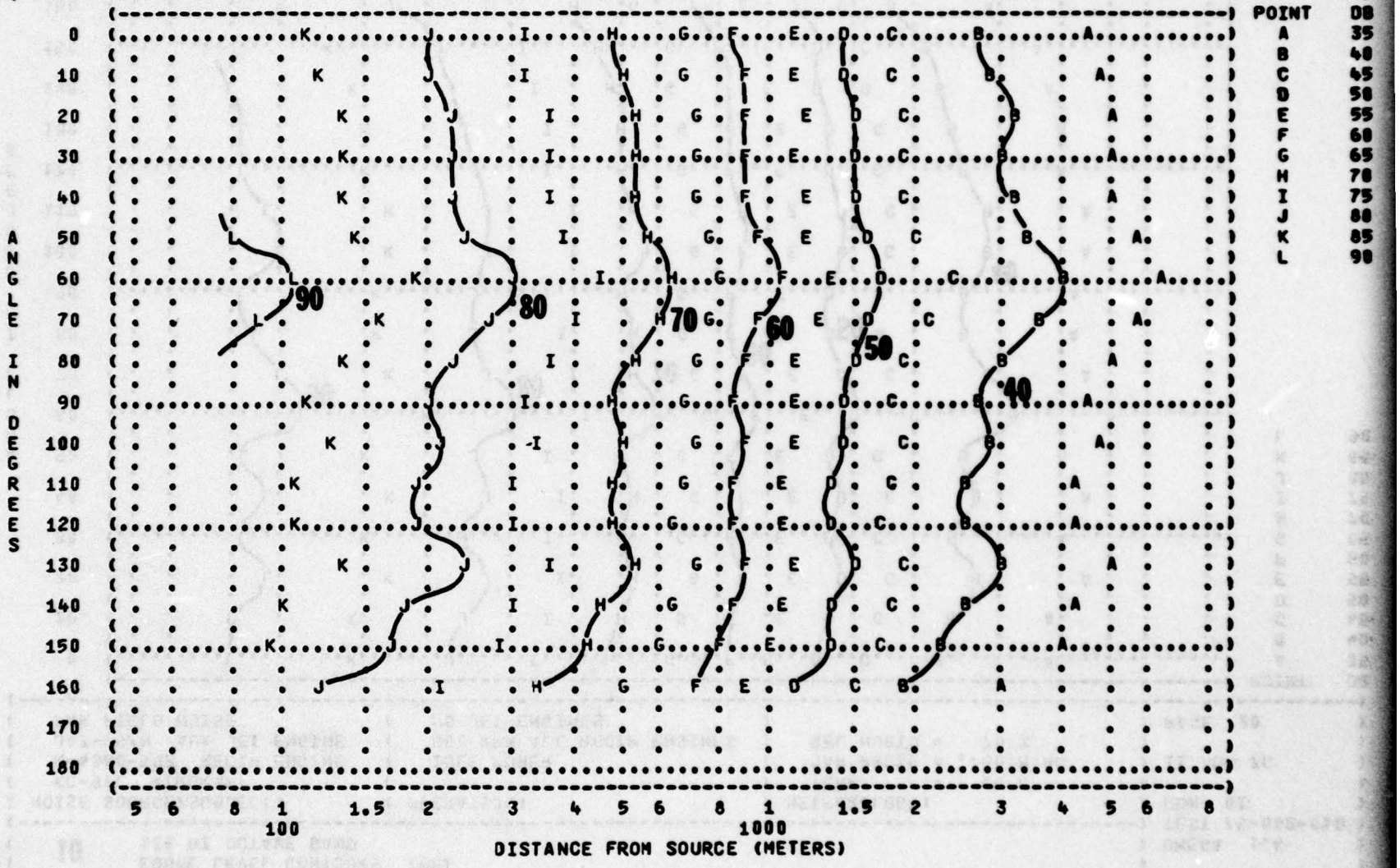
SOUND PRESSURE LEVEL (SPL)
EQUAL LEVEL CONTOURS (DB)
63 HZ OCTAVE BAND

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 01
11 AUG 76
PAGE 19

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-598 RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER
900 RPM ALL RECIP ENGINES
NO JET ENGINES

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %




| POINT | DB |
|---|---|
| A | 35 |
| B | 40 |
| C | 45 |
| D | 50 |
| E | 55 |
| F | 60 |
| G | 65 |
| H | 70 |
| I | 75 |
| J | 80 |
| K | 85 |
| L | 90 |

FIGURE: 10

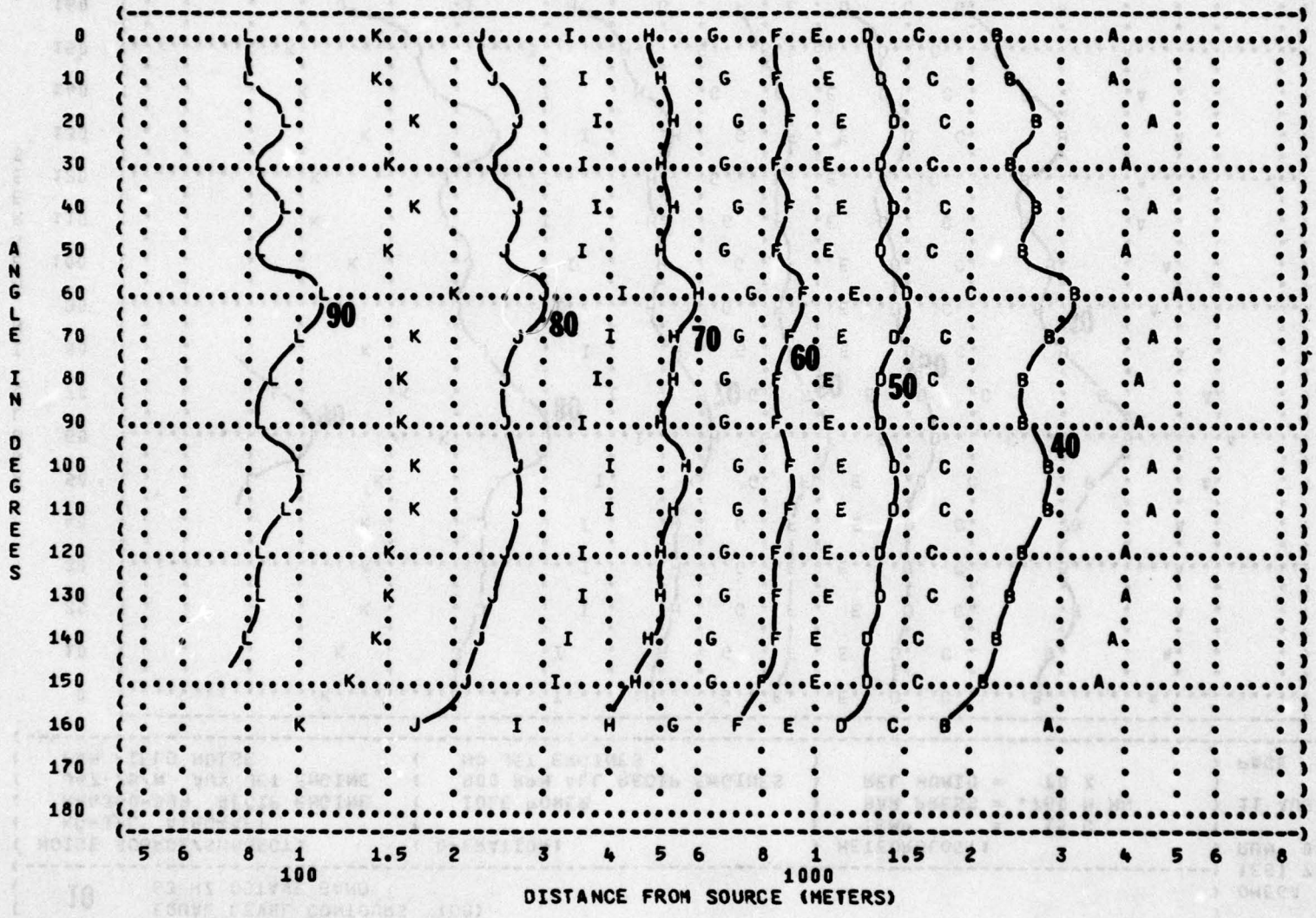
SOUND PRESSURE LEVEL (SPL)
EQUAL LEVEL CONTOURS (DB)
125 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER
900 RPM ALL RECIP ENGINES
NO JET ENGINES

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 01
11 AUG 76
PAGE 20




| POINT | DB |
|---|---|
| A | 35 |
| B | 40 |
| C | 45 |
| D | 50 |
| E | 55 |
| F | 60 |
| G | 65 |
| H | 70 |
| I | 75 |
| J | 80 |
| K | 85 |
| L | 90 |

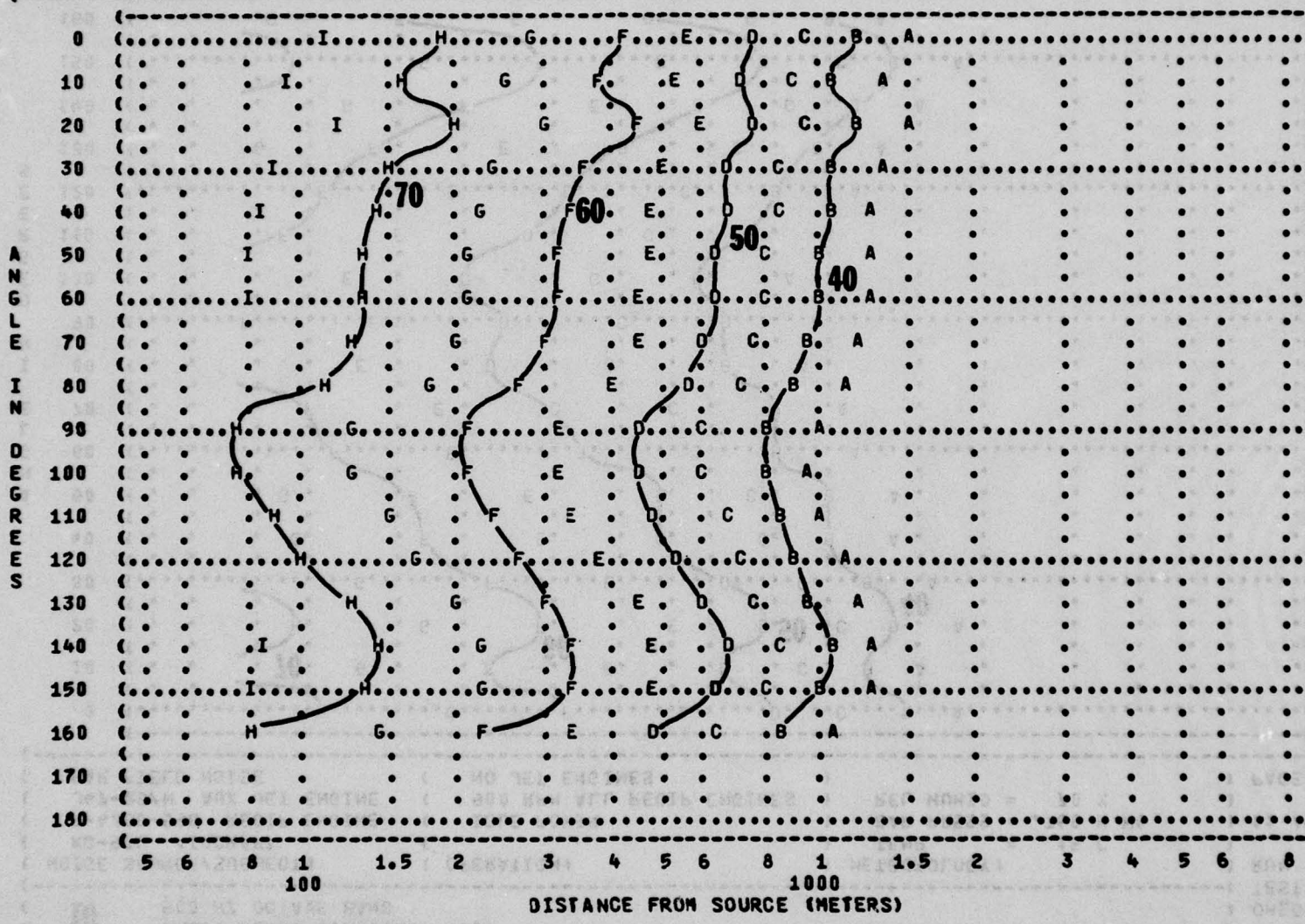
FIGURE 10: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 250 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER
900 RPM ALL RECIP ENGINES
NO JET ENGINES

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 01
11 AUG 76
PAGE 21




| POINT | DB |
|---|---|
| A | 35 |
| B | 40 |
| C | 45 |
| D | 50 |
| E | 55 |
| F | 60 |
| G | 65 |
| H | 70 |
| I | 75 |

FIGURE 10: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 500 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-598 RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER
900 RPM ALL RECIP ENGINES
NO JET ENGINES

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 01
11 AUG 76
PAGE 22

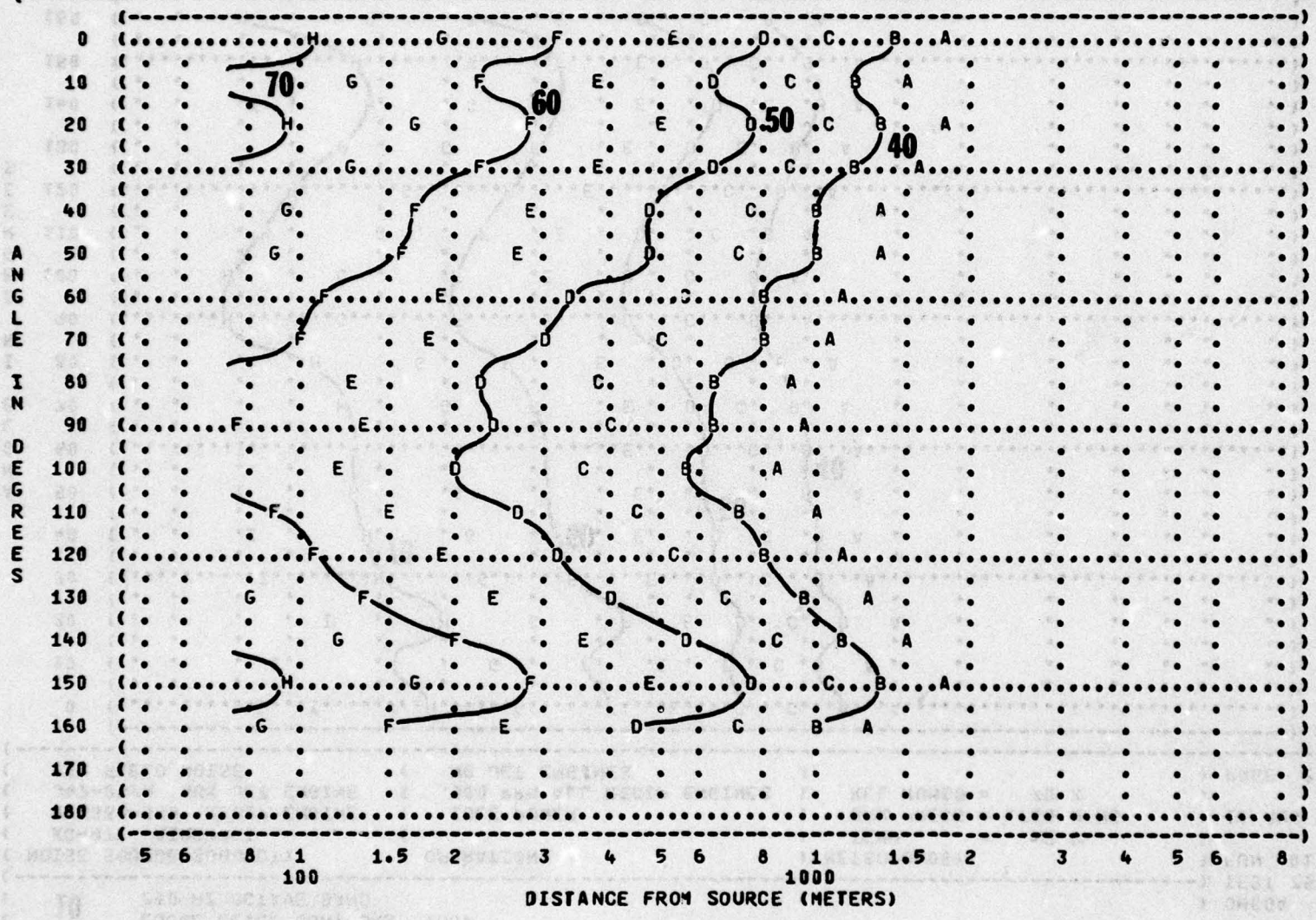


FIGURE: 10

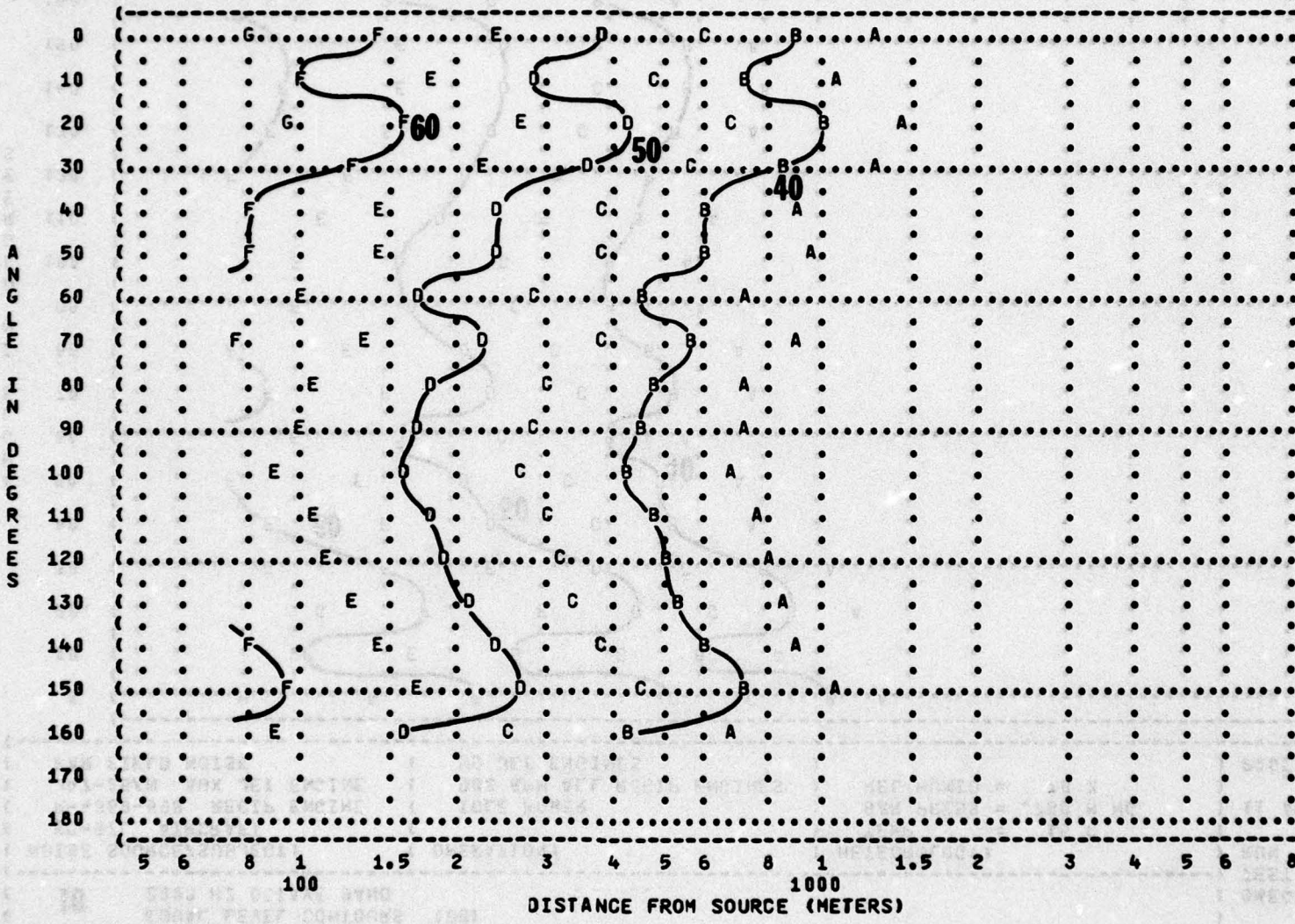
SOUND PRESSURE LEVEL (SPL)
EQUAL LEVEL CONTOURS (DB)
1000 HZ OCTAVE BAND

IDENTIFICATION:
OMEGA 1.4
TEST 75-082-016
RUN 01
11 AUG 76
PAGE 23

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER
900 RPM ALL RECIP ENGINES
NO JET ENGINES

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %




| POINT | DB |
|---|---|
| A | 35 |
| B | 40 |
| C | 45 |
| D | 50 |
| E | 55 |
| F | 60 |
| G | 65 |

FIGURE: 10

SOUND PRESSURE LEVEL (SPL)
EQUAL LEVEL CONTOURS (DB)
2000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER
900 RPM ALL RECIP ENGINES
NO JET ENGINES

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-802-016
RUN 01
11 AUG 76
PAGE 24

| POINT | DB |
|---|---|
| A | 35 |
| B | 40 |
| C | 45 |
| D | 50 |
| E | 55 |
| F | 60 |
| G | 65 |
| H | 70 |

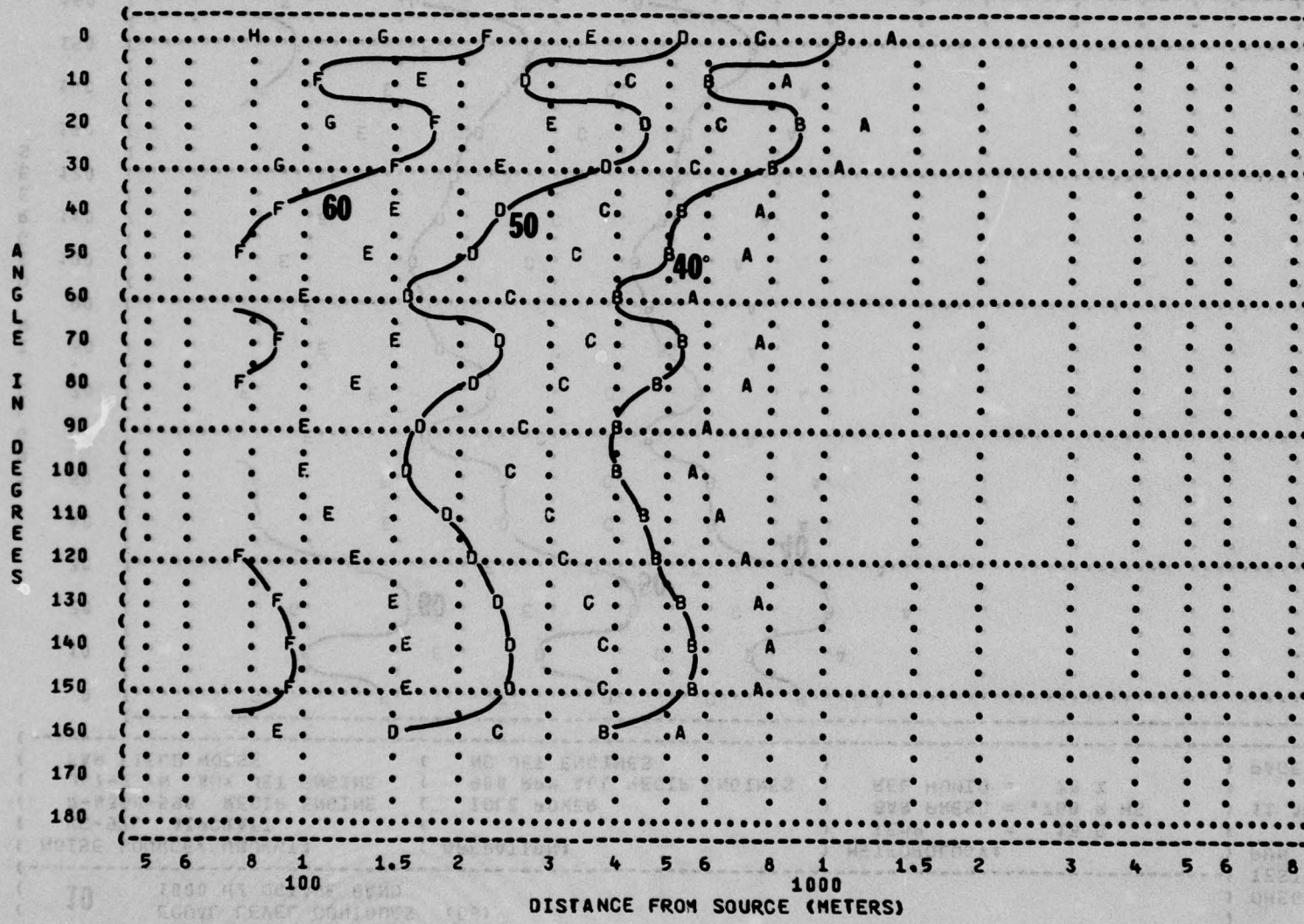


FIGURE 10: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 4000 HZ OCTAVE BAND

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 01
11 AUG 76
PAGE 25

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER
900 RPM ALL RECIP ENGINES
NO JET ENGINES

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

| POINT | DB |
|---|---|
| A | 35 |
| B | 40 |
| C | 45 |
| D | 50 |
| E | 55 |
| F | 60 |

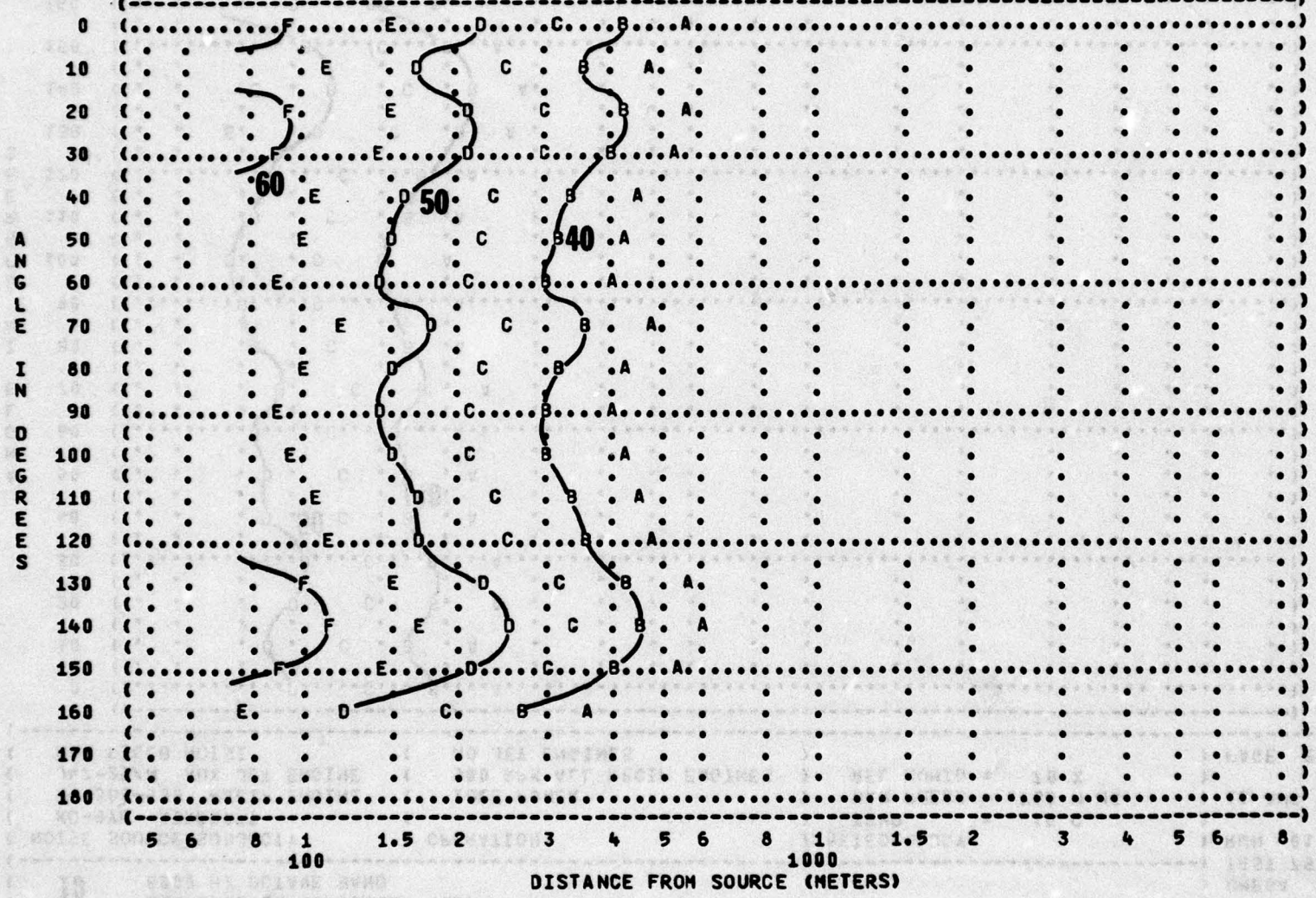


FIGURE: 10

SOUND PRESSURE LEVEL (SPL)
EQUAL LEVEL CONTOURS (DB)
8000 HZ OCTAVE BAND

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 01
11 AUG 76
PAGE 26

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER
900 RPM ALL RECIP ENGINES
NO JET ENGINES

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

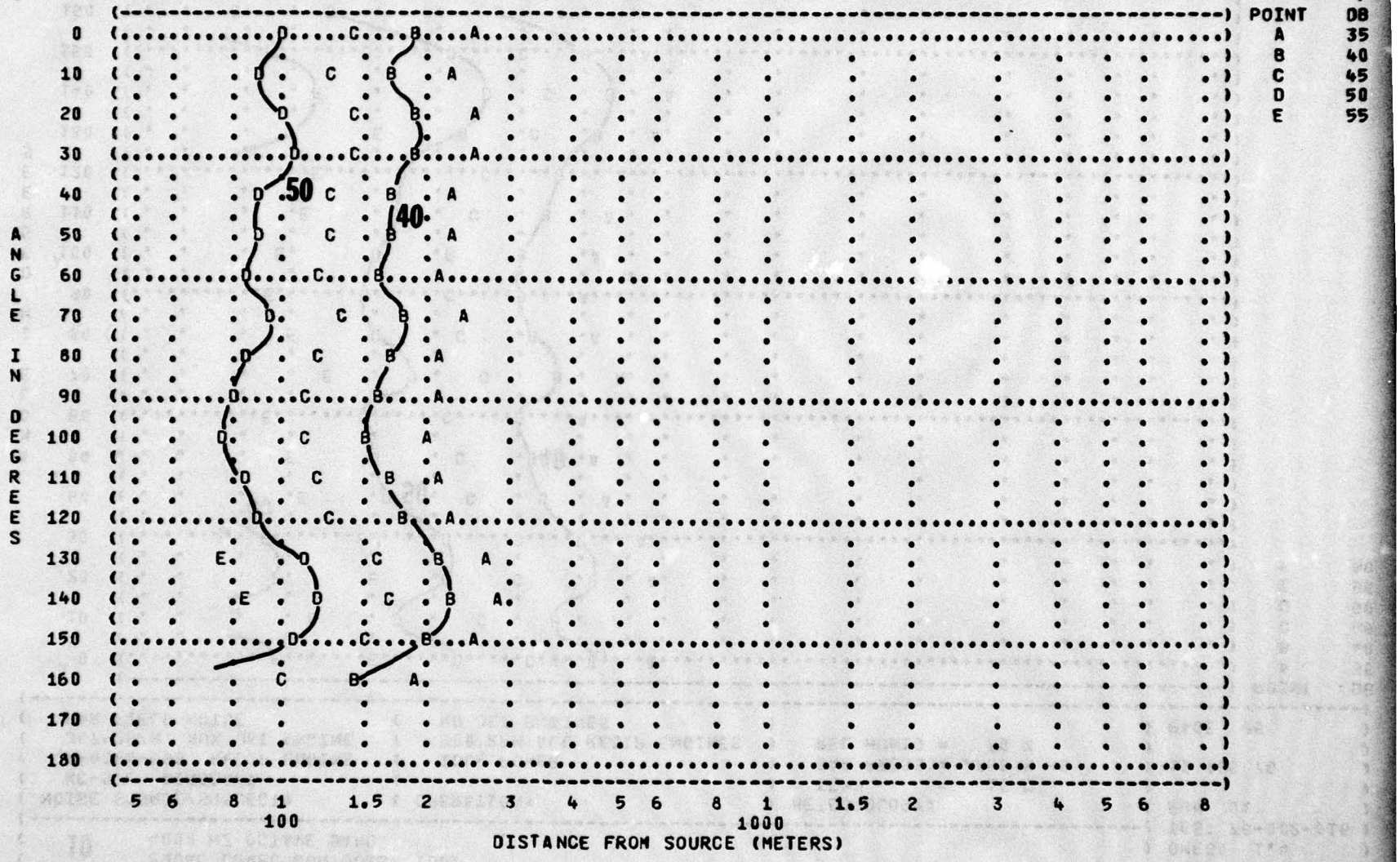


FIGURE: 10

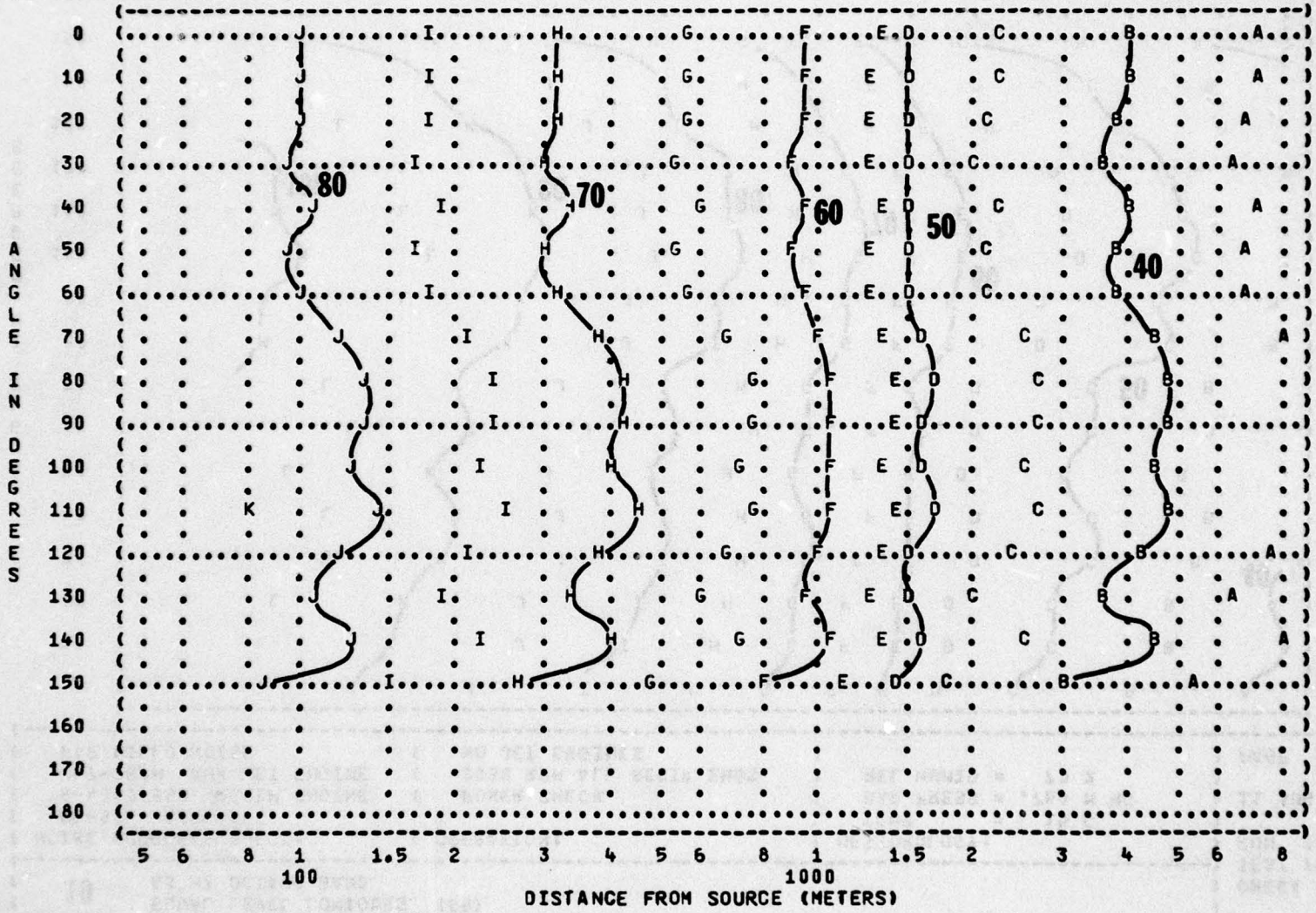
SOUND PRESSURE LEVEL (SPL)
EQUAL LEVEL CONTOURS (DB)
31.5 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
POWER CHECK
2050 RPM ALL RECIP ENGS
NO JET ENGINES

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 02
11 AUG 76
PAGE 18




| POINT | DB |
|---|---|
| A | 35 |
| B | 40 |
| C | 45 |
| D | 50 |
| E | 55 |
| F | 60 |
| G | 65 |
| H | 70 |
| I | 75 |
| J | 80 |
| K | 85 |

FIGURE: 10

SOUND PRESSURE LEVEL (SPL)
EQUAL LEVEL CONTOURS (DB)
63 HZ OCTAVE BAND

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 02
11 AUG 76
PAGE 19

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
POWER CHECK
2050 RPM ALL RECIP ENGS
NO JET ENGINES

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

| POINT | DB |
|---|---|
| A | 40 |
| B | 45 |
| C | 50 |
| D | 55 |
| E | 60 |
| F | 65 |
| G | 70 |
| H | 75 |
| I | 80 |
| J | 85 |
| K | 90 |
| L | 95 |
| M | 100 |

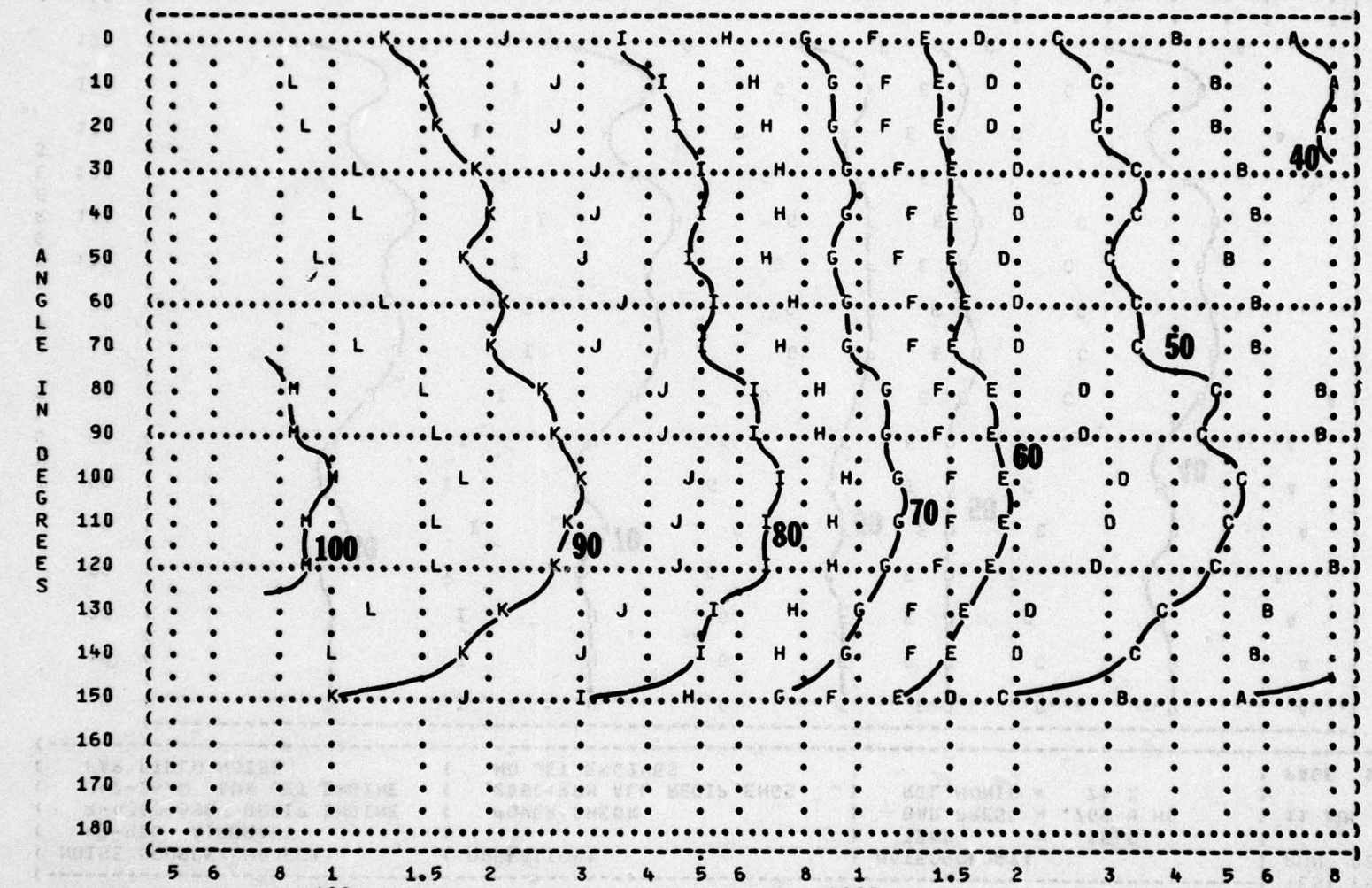


FIGURE 10: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 125 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-598 RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
POWER CHECK
2050 RPM ALL RECIP ENGS
NO JET ENGINES

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 02
11 AUG 76
PAGE 20

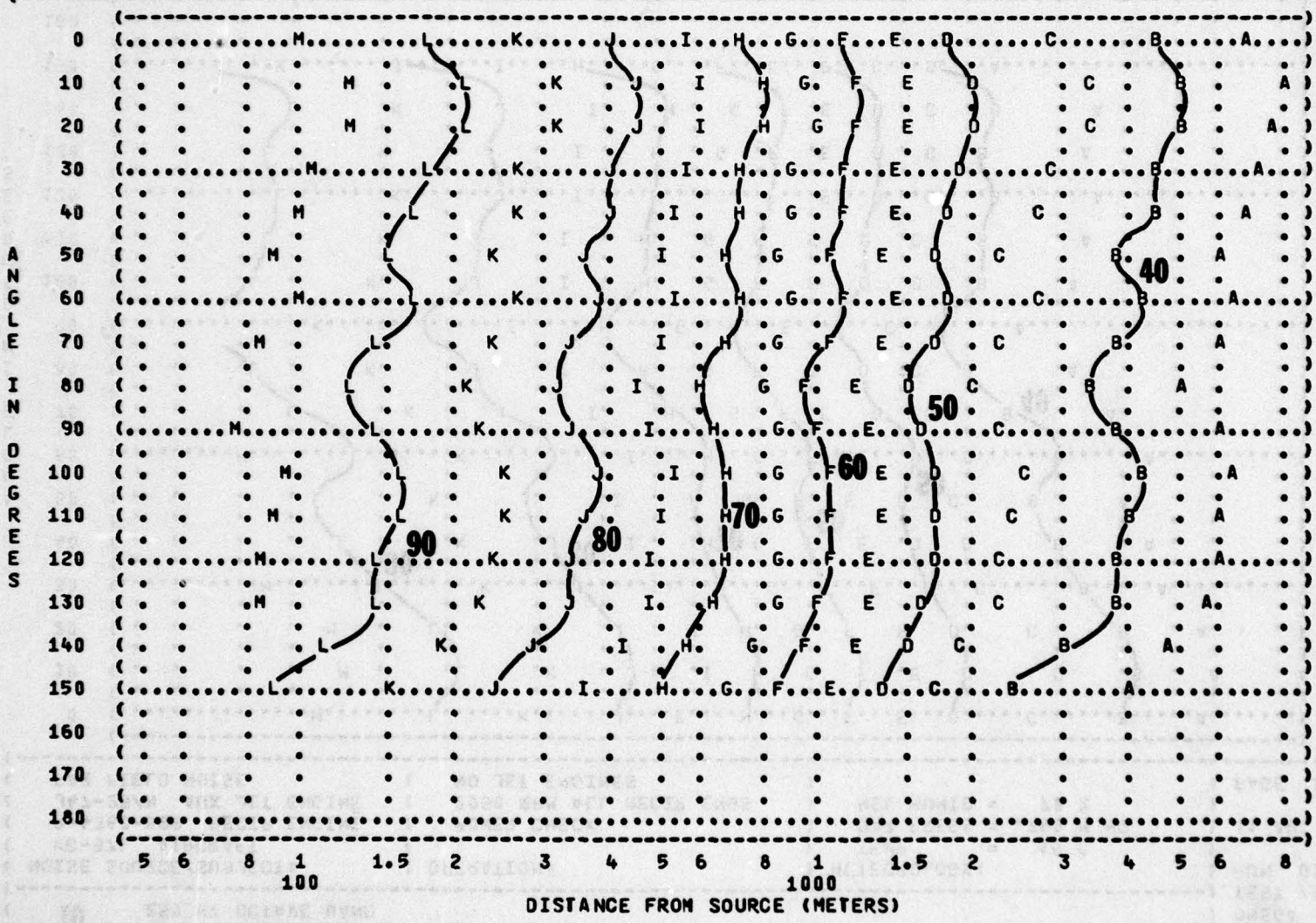


FIGURE: 10

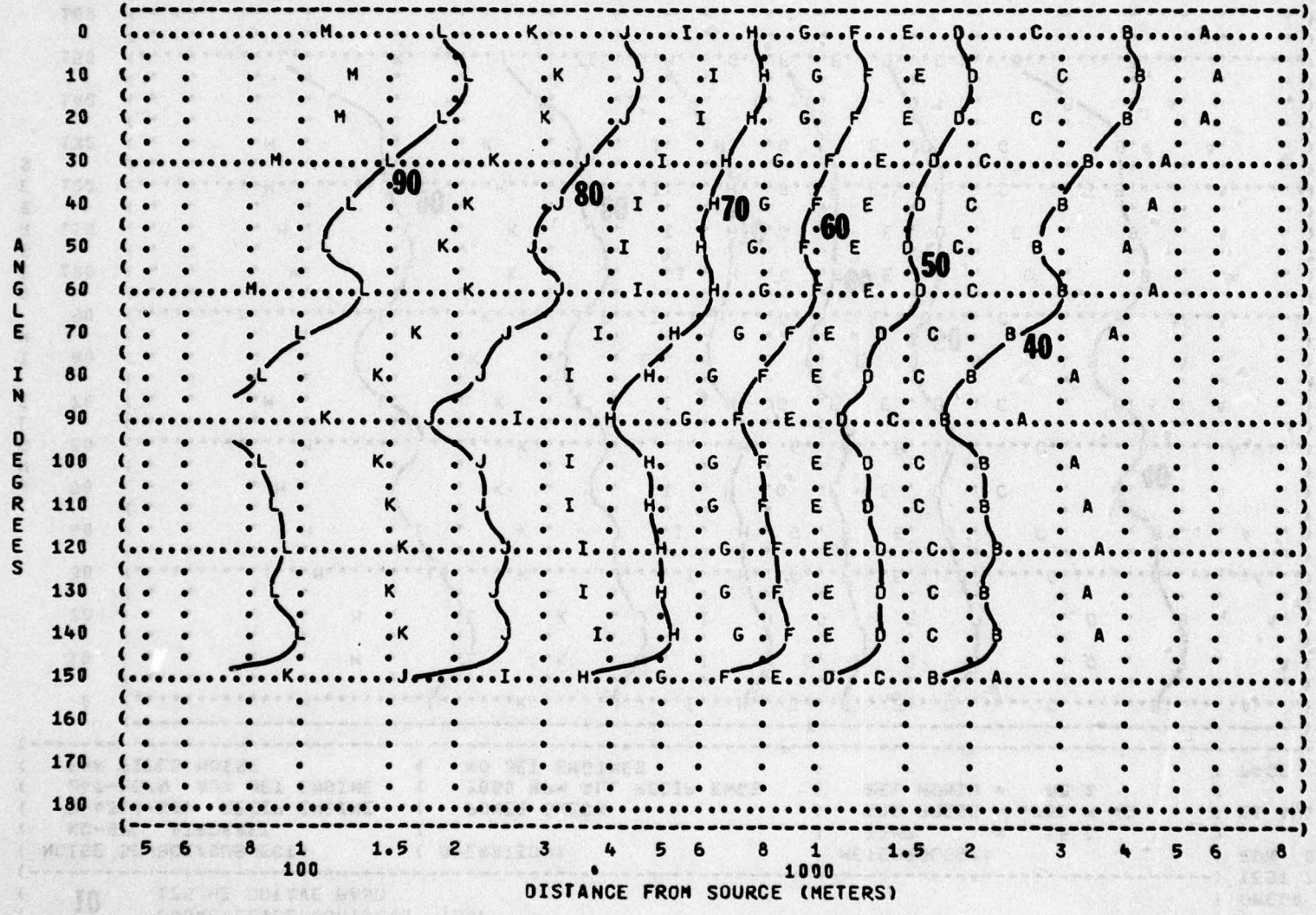
SOUND PRESSURE LEVEL (SPL)
EQUAL LEVEL CONTOURS (DB)
250 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
POWER CHECK
2050 RPM ALL RECIP ENGS
NO JET ENGINES

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 02
11 AUG 76
PAGE 21




| POINT | DB |
|---|---|
| A | 35 |
| B | 40 |
| C | 45 |
| D | 50 |
| E | 55 |
| F | 60 |
| G | 65 |
| H | 70 |
| I | 75 |
| J | 80 |
| K | 85 |
| L | 90 |
| M | 95 |

FIGURE: 10

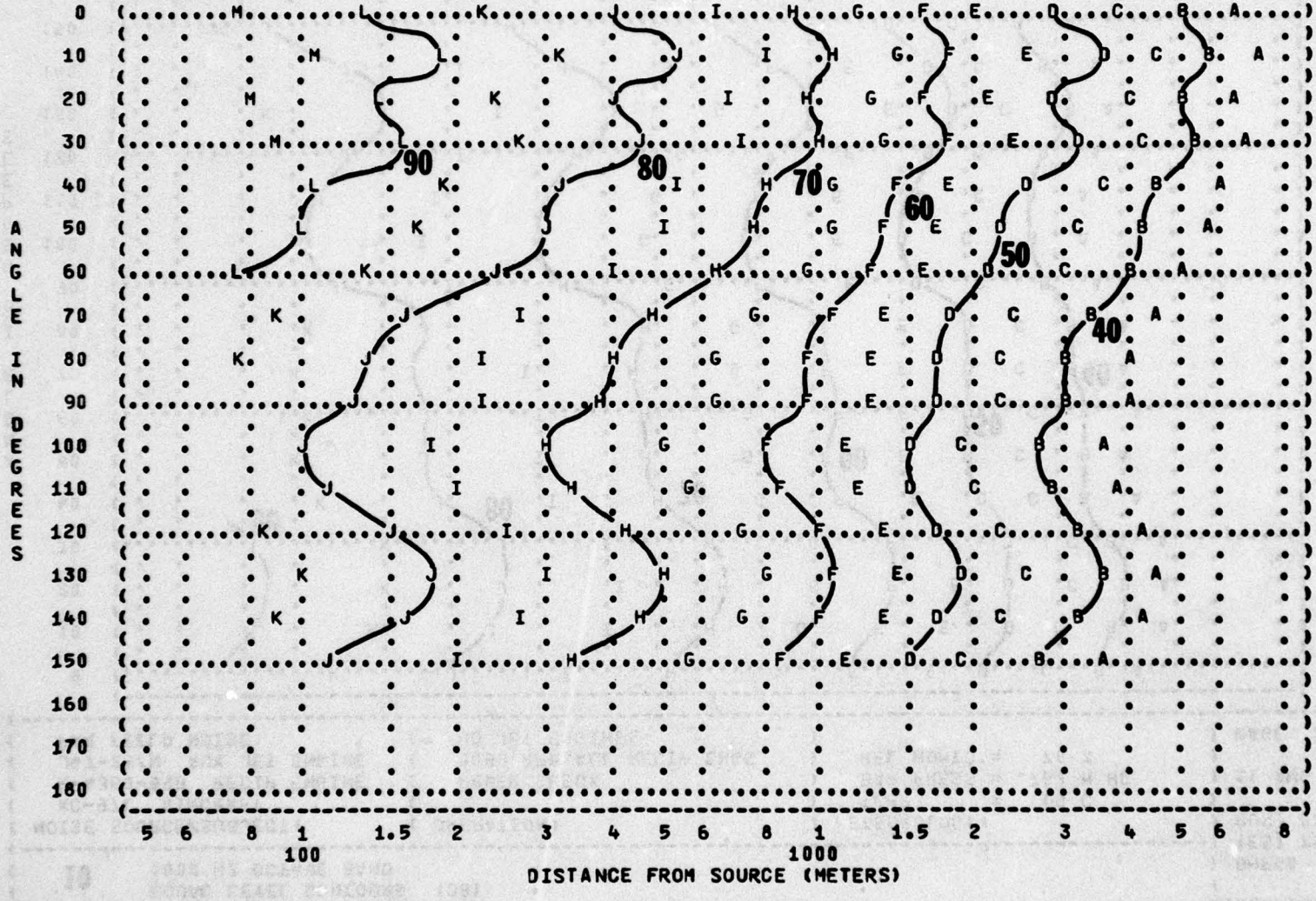
SOUND PRESSURE LEVEL (SPL)
EQUAL LEVEL CONTOURS (DB)
500 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
POWER CHECK
2050 RPM ALL RECIP ENGS
NO JET ENGINES

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 02
11 AUG 76
PAGE 22




| POINT | DB |
|---|---|
| A | 35 |
| B | 40 |
| C | 45 |
| D | 50 |
| E | 55 |
| F | 60 |
| G | 65 |
| H | 70 |
| I | 75 |
| J | 80 |
| K | 85 |
| L | 90 |
| M | 95 |

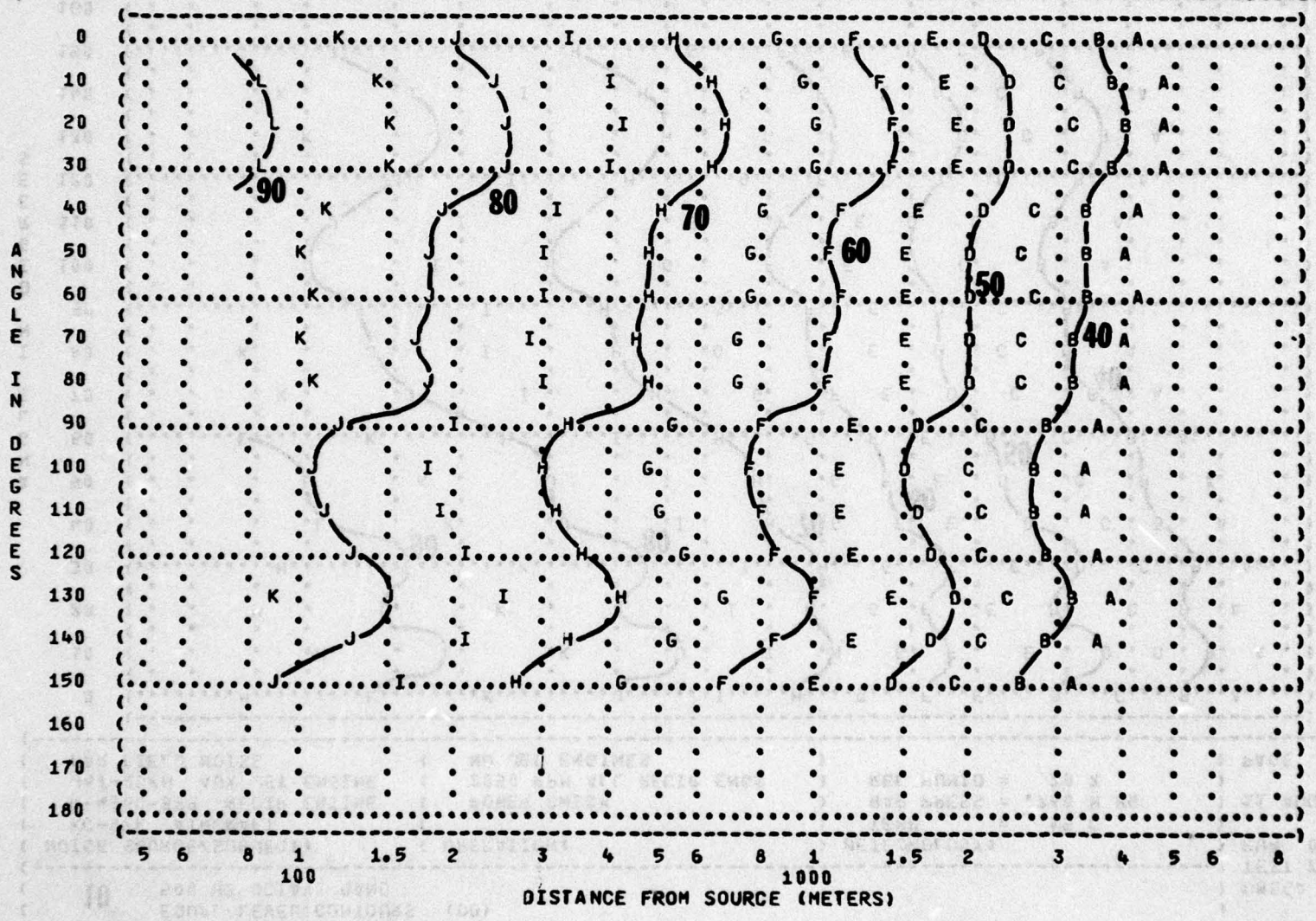
FIGURE 10: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 1000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
POWER CHECK
2050 RPM ALL RECIP ENGS
NO JET ENGINES

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 02
11 AUG 76
PAGE 23




| POINT | DB |
|---|---|
| A | 35 |
| B | 40 |
| C | 45 |
| D | 50 |
| E | 55 |
| F | 60 |
| G | 65 |
| H | 70 |
| I | 75 |
| J | 80 |
| K | 85 |
| L | 90 |

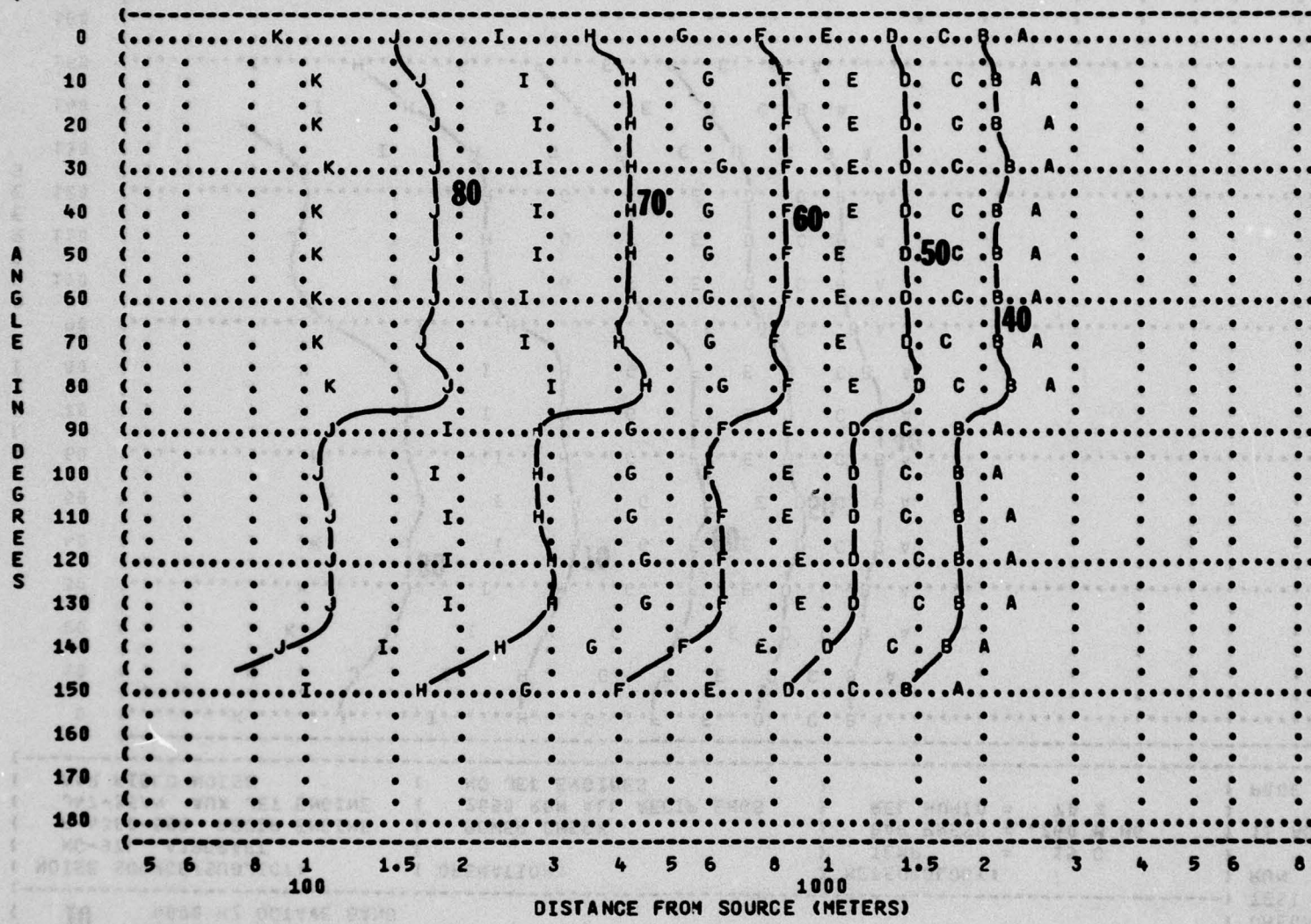
FIGURE: 10 SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 2000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
KO-97L AIRCRAFT
R-4360-598 RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
POWER CHECK
2050 RPM ALL RECIP ENGS
NO JET ENGINES

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 02
11 AUG 76
PAGE 24




| POINT | DB |
|---|---|
| A | 35 |
| B | 40 |
| C | 45 |
| D | 50 |
| E | 55 |
| F | 60 |
| G | 65 |
| H | 70 |
| I | 75 |
| J | 80 |
| K | 85 |

FIGURE: 10 SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 4000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
POWER CHECK
2050 RPM ALL RECIP ENGS
NO JET ENGINES

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 02
11 AUG 76
PAGE 25

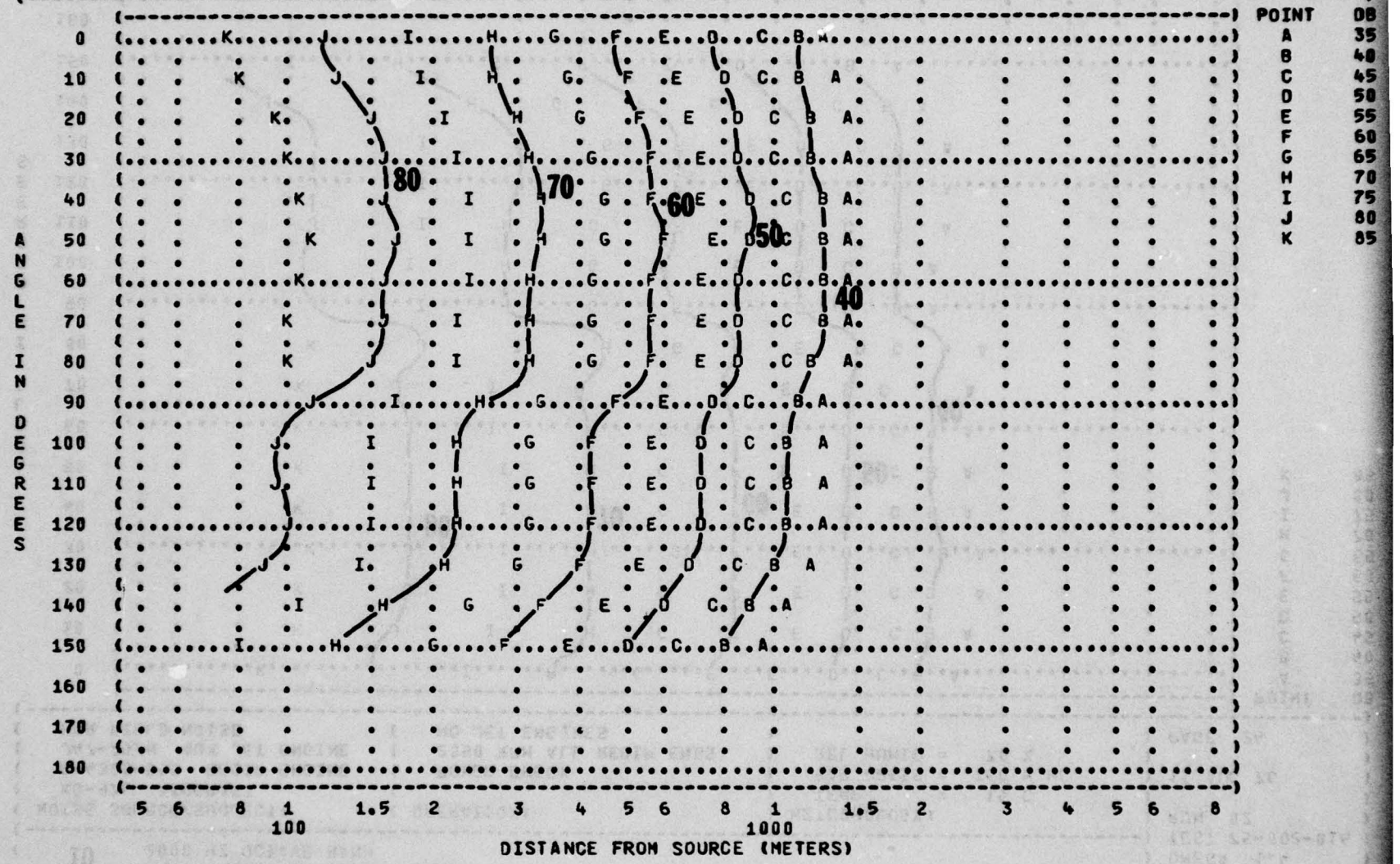


FIGURE: 10

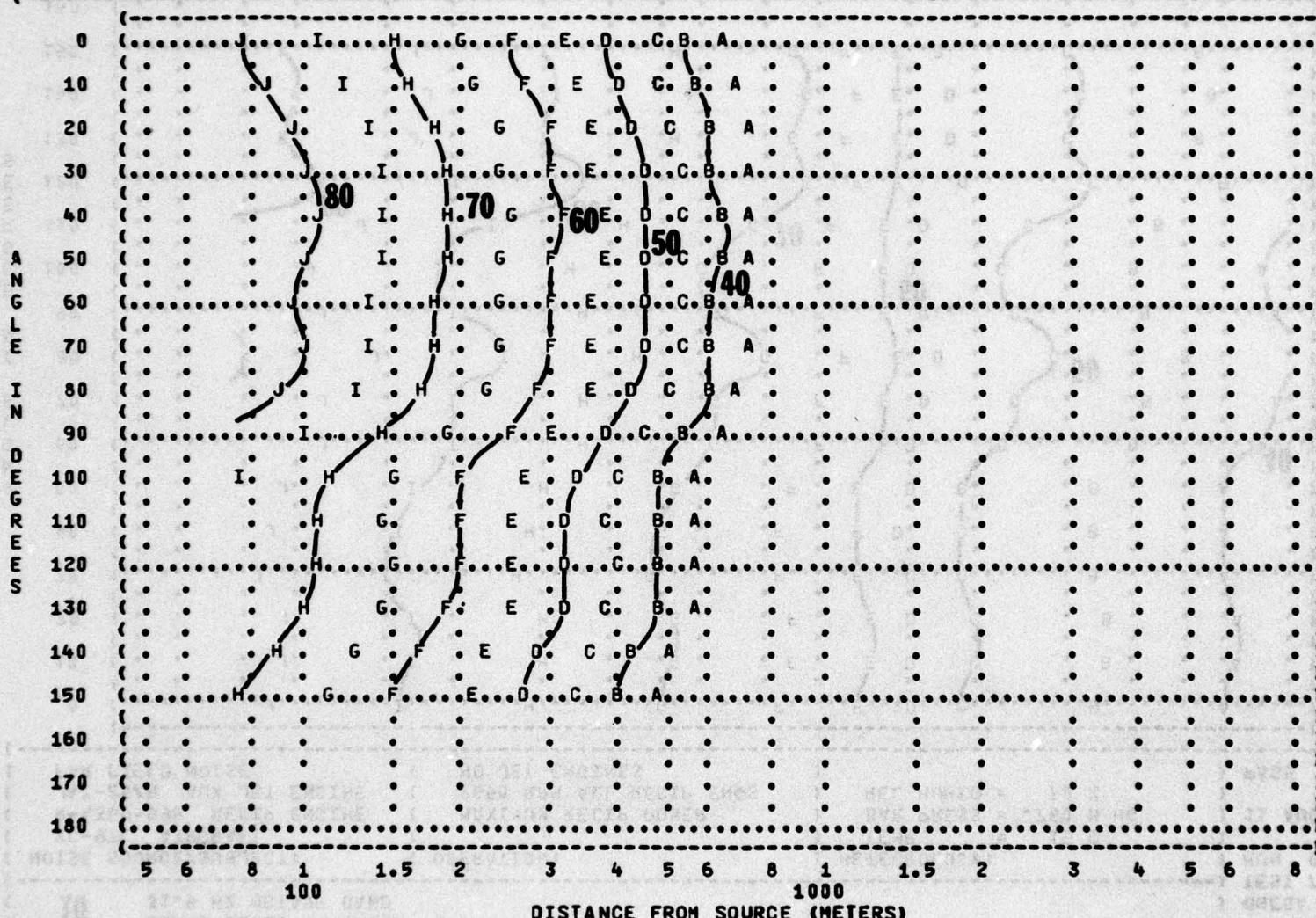
SOUND PRESSURE LEVEL (SPL)
EQUAL LEVEL CONTOURS (DB)
8000 HZ OCTAVE BAND

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 02
11 AUG 76
PAGE 26

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
POWER CHECK
2050 RPM ALL RECIP ENGS
NO JET ENGINES

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %




| POINT | DB |
|---|---|
| A | 35 |
| B | 40 |
| C | 45 |
| D | 50 |
| E | 55 |
| F | 60 |
| G | 65 |
| H | 70 |
| I | 75 |
| J | 80 |

FIGURE 10: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 31.5 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM RECIP POWER
2650 RPM ALL RECIP ENGS
NO JET ENGINES

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-082-016
RUN 03
11 AUG 76
PAGE 18

| POINT | DB |
|---|---|
| A | 40 |
| B | 45 |
| C | 50 |
| D | 55 |
| E | 60 |
| F | 65 |
| G | 70 |
| H | 75 |
| I | 80 |
| J | 85 |
| K | 90 |

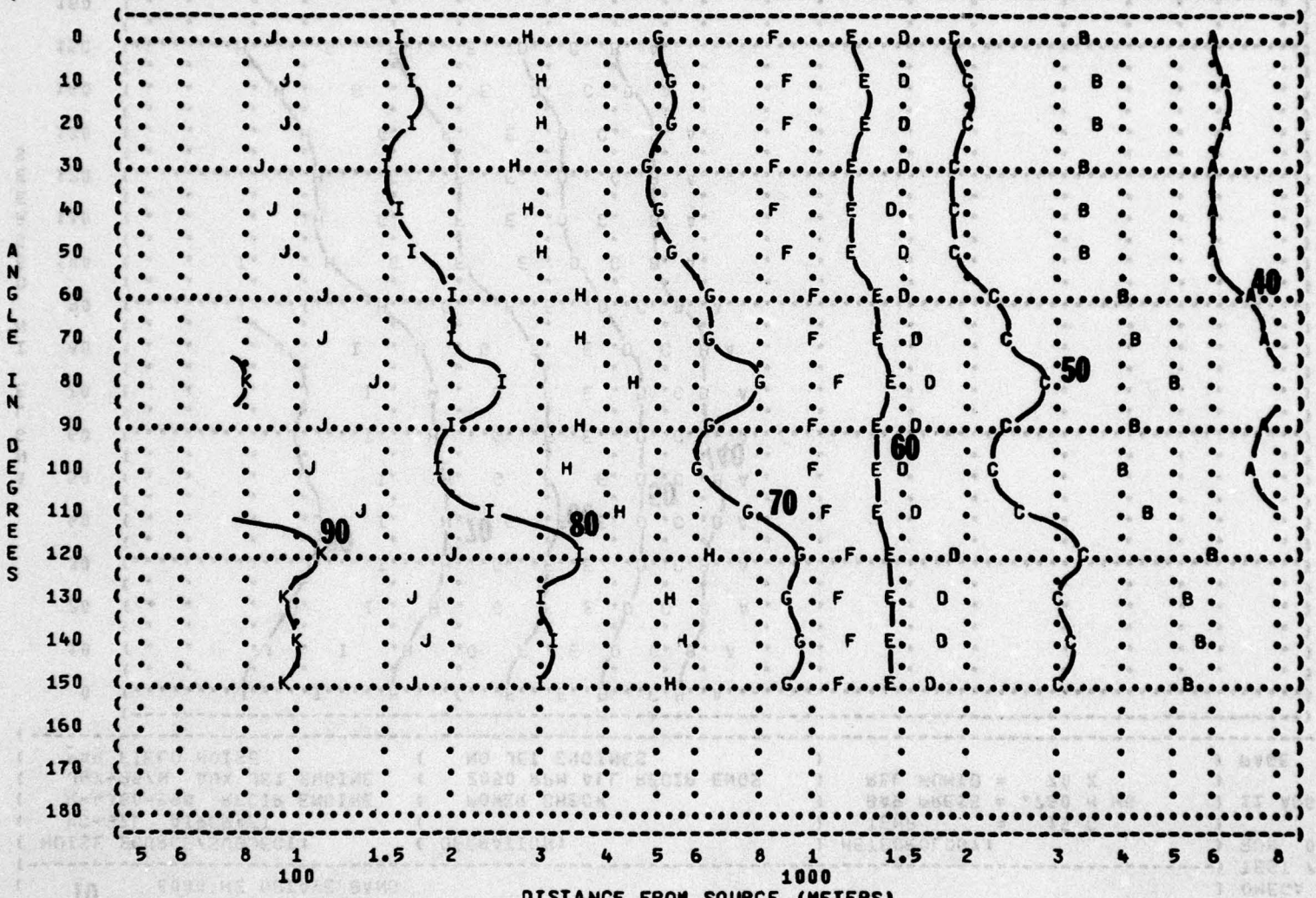


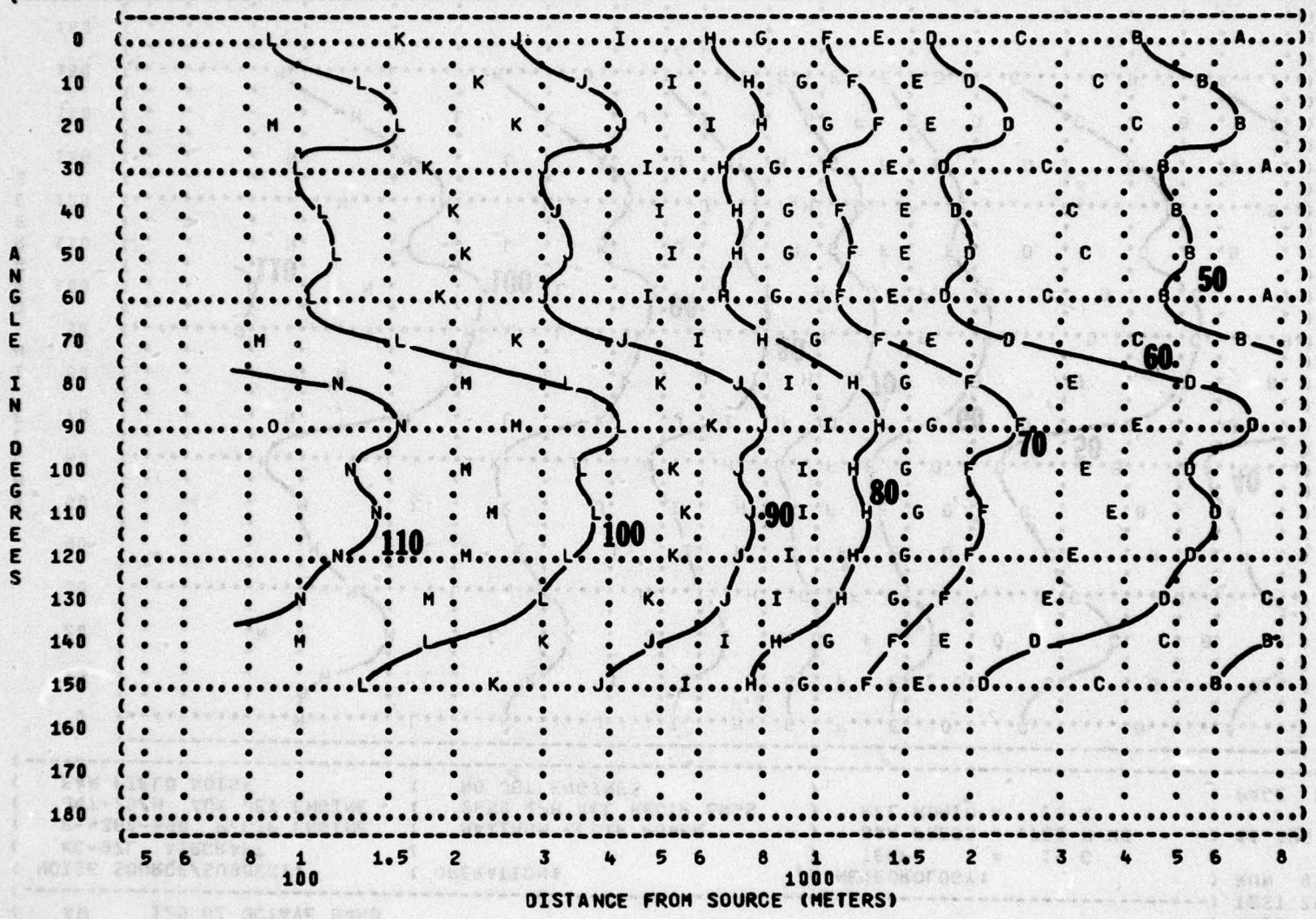
FIGURE: 10 SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 63 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM RECIP POWER
2650 RPM ALL RECIP ENGS
NO JET ENGINES

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 03
11 AUG 76
PAGE 19




| POINT | DB |
|---|---|
| A | 45 |
| B | 50 |
| C | 55 |
| D | 60 |
| E | 65 |
| F | 70 |
| G | 75 |
| H | 80 |
| I | 85 |
| J | 90 |
| K | 95 |
| L | 100 |
| M | 105 |
| N | 110 |
| O | 115 |

FIGURE: 10

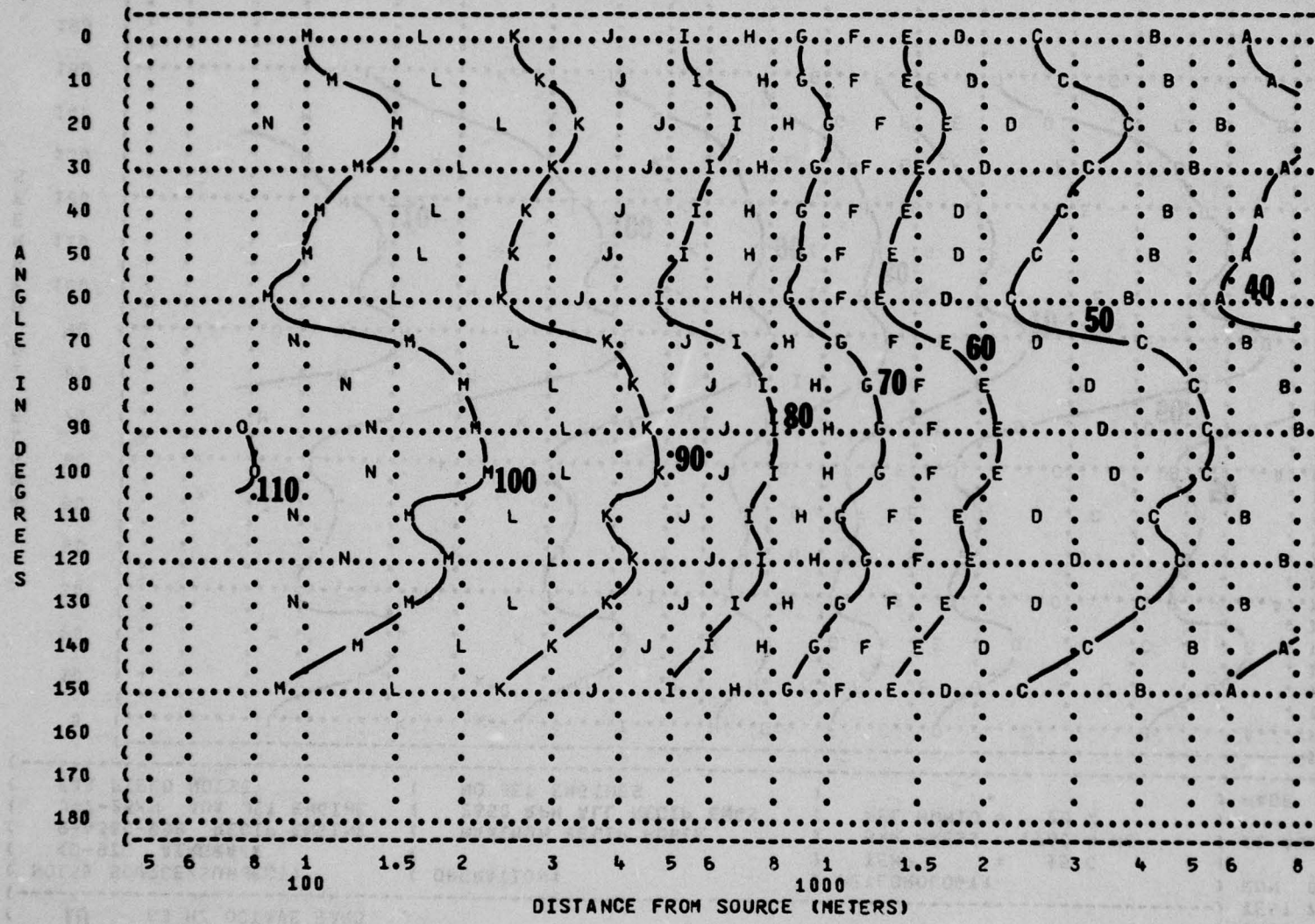
SOUND PRESSURE LEVEL (SPL)
EQUAL LEVEL CONTOURS (DB)
125 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM RECIP POWER
2650 RPM ALL RECIP ENGS
NO JET ENGINES

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 03
11 AUG 76
PAGE 20




| POINT | DB |
|---|---|
| A | 40 |
| B | 45 |
| C | 50 |
| D | 55 |
| E | 60 |
| F | 65 |
| G | 70 |
| H | 75 |
| I | 80 |
| J | 85 |
| K | 90 |
| L | 95 |
| M | 100 |
| N | 105 |
| O | 110 |

FIGURE: 10

SOUND PRESSURE LEVEL (SPL)
EQUAL LEVEL CONTOURS (DB)
250 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM RECIP POWER
2650 RPM ALL RECIP ENGS
NO JET ENGINES

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 93
11 AUG 76
PAGE 21

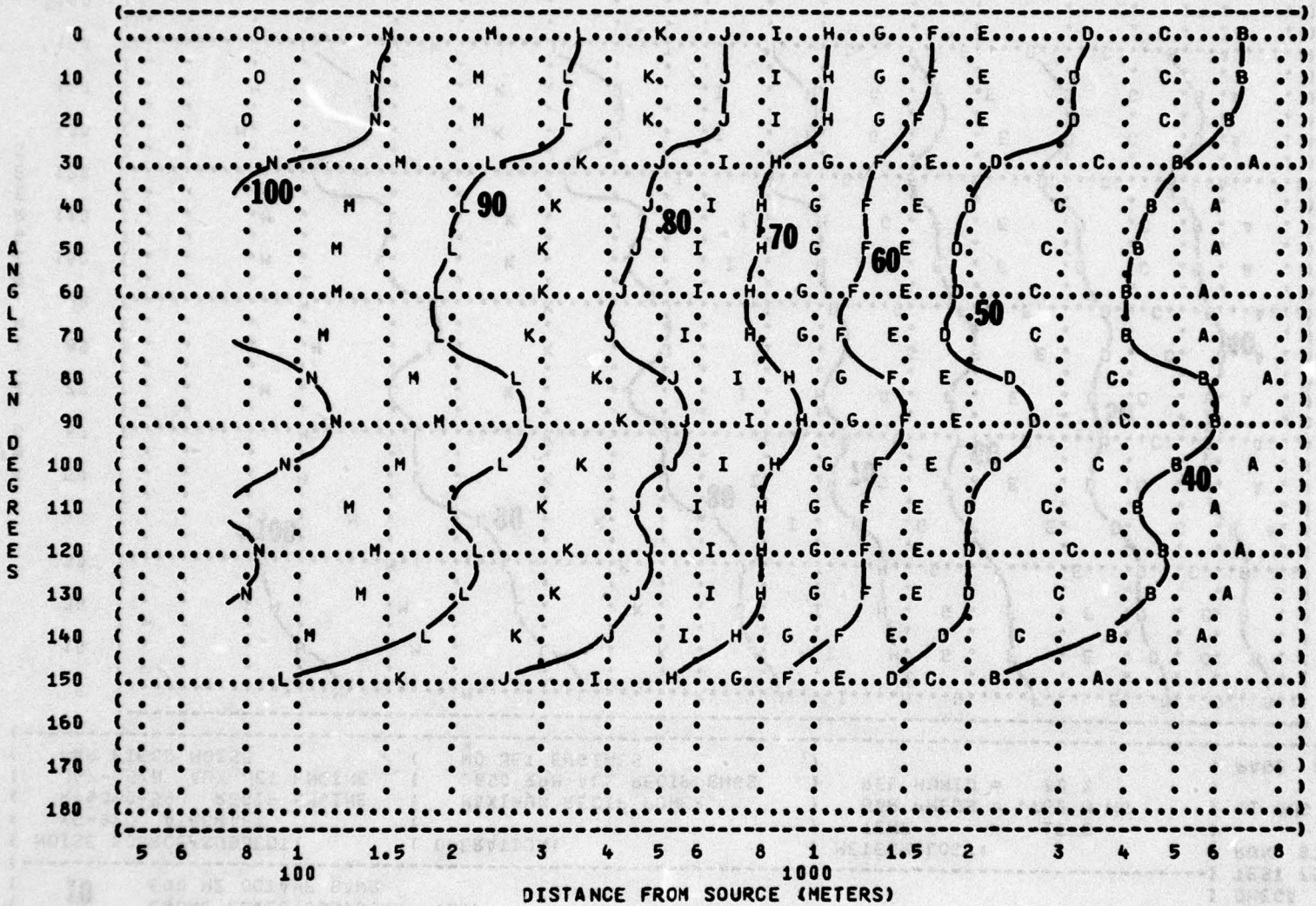


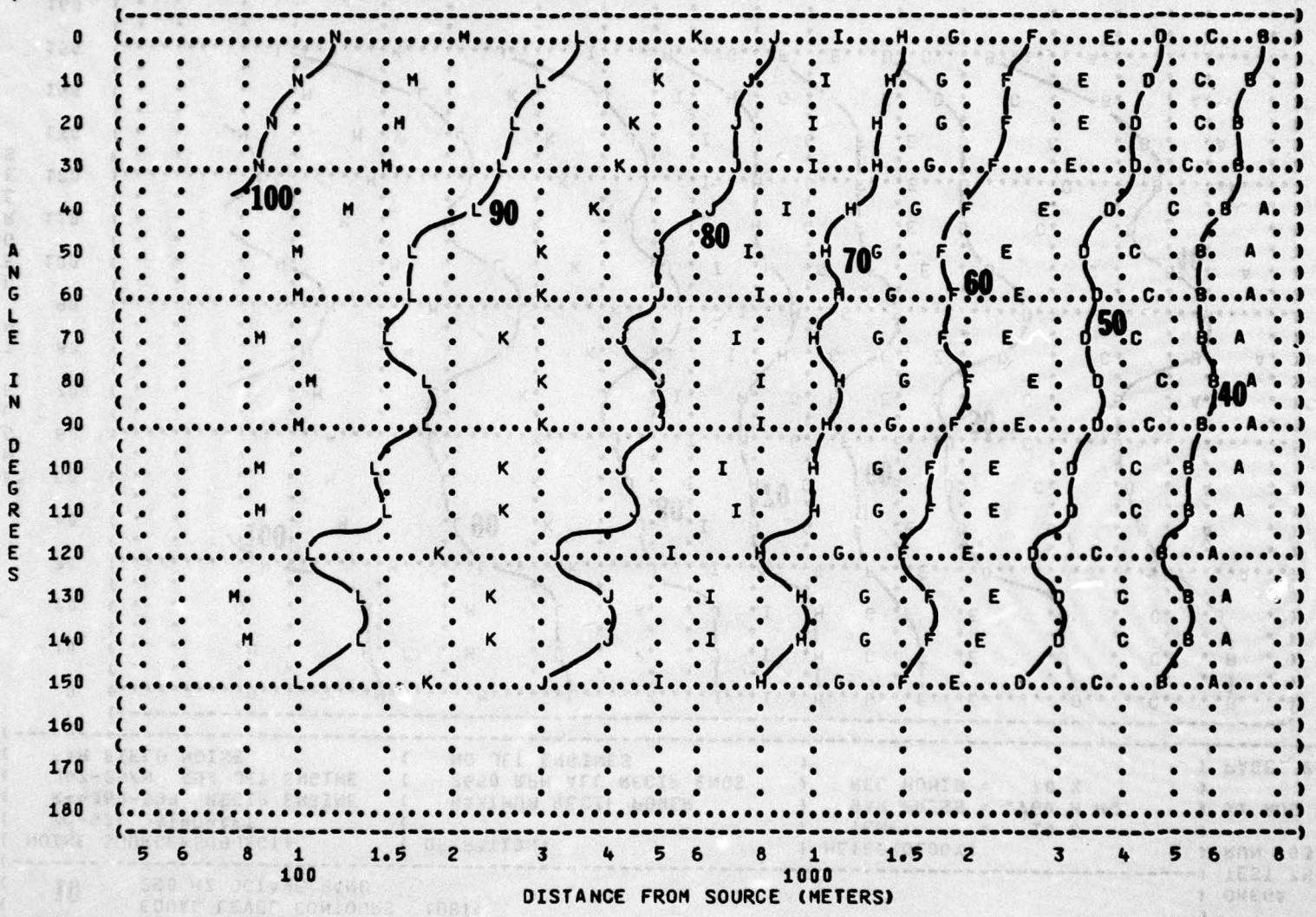
FIGURE: 10 SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 500 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM RECIP POWER
2650 RPM ALL RECIP ENGS
NO JET ENGINES

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 03
11 AUG 76
PAGE 22




| POINT | DB |
|---|---|
| A | 35 |
| B | 40 |
| C | 45 |
| D | 50 |
| E | 55 |
| F | 60 |
| G | 65 |
| H | 70 |
| I | 75 |
| J | 80 |
| K | 85 |
| L | 90 |
| M | 95 |
| N | 100 |

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USAF BIOENVIRONMENTAL NOISE DATA HANDBOOK. VOLUME 101. KC-97L A--ETC(U)
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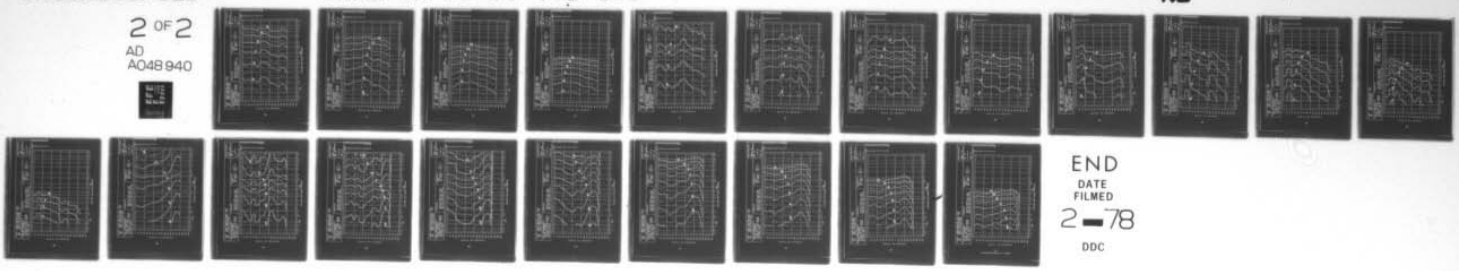

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FIGURE: 10

SOUND PRESSURE LEVEL (SPL)
EQUAL LEVEL CONTOURS (DB)
1000 HZ OCTAVE BAND

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 03
11 AUG 76
PAGE 23

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM RECIP POWER
2650 RPM ALL RECIP ENGS
NO JET ENGINES

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

| POINT | DB |
|---|---|
| A | 35 |
| B | 40 |
| C | 45 |
| D | 50 |
| E | 55 |
| F | 60 |
| G | 65 |
| H | 70 |
| I | 75 |
| J | 80 |
| K | 85 |
| L | 90 |
| M | 95 |
| N | 100 |

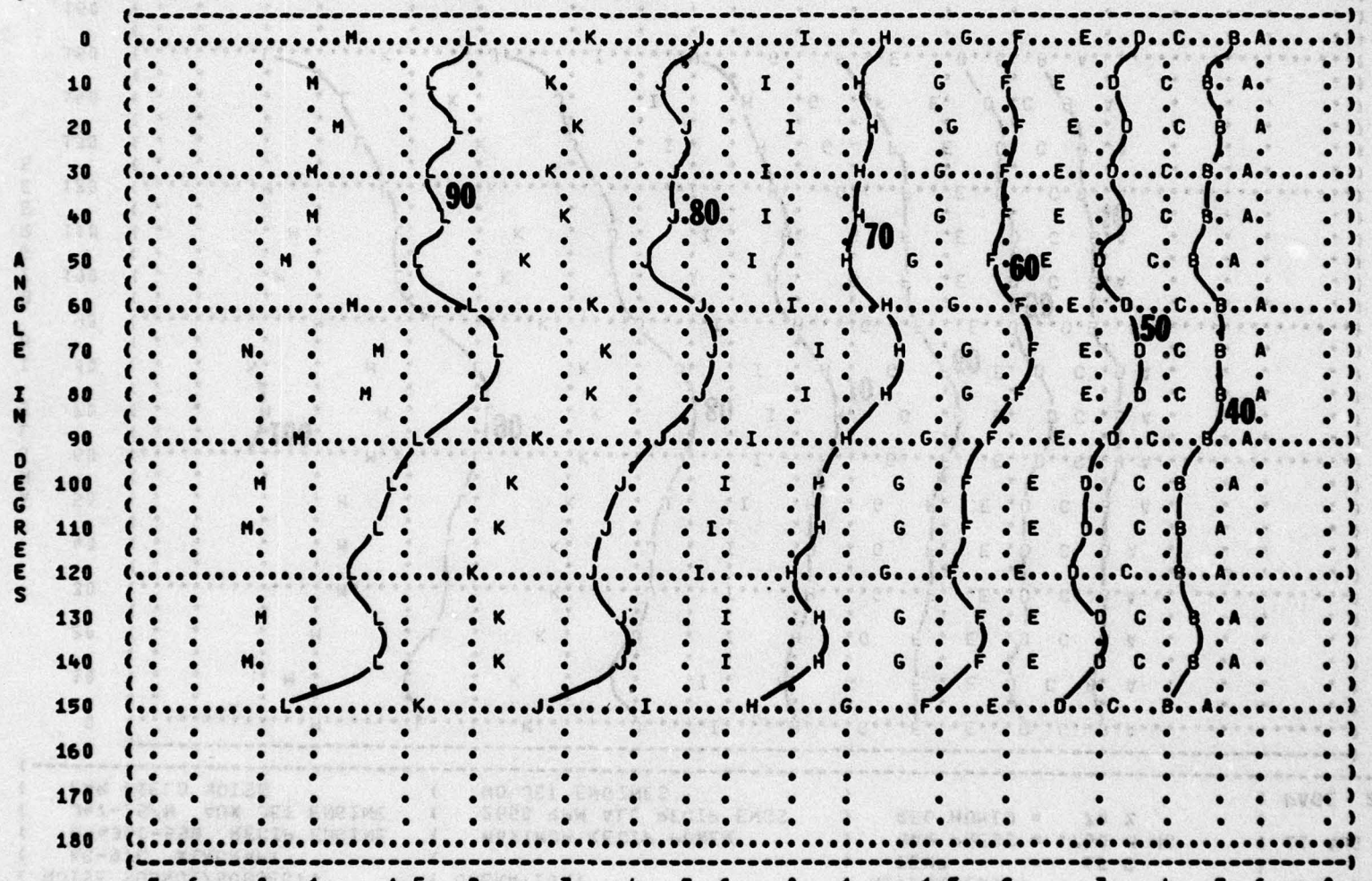


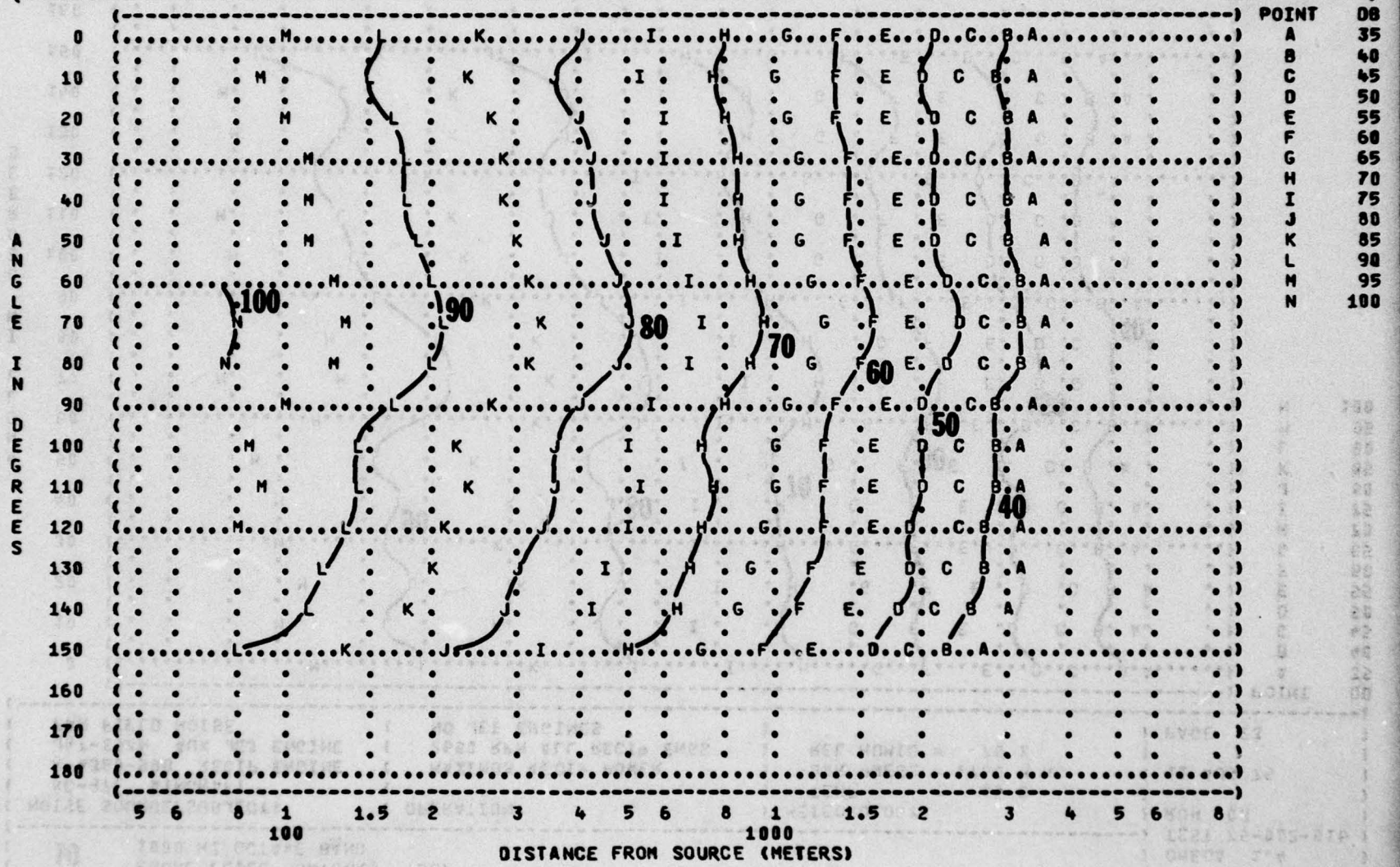
FIGURE 10: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 2000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM RECIP POWER
2650 RPM ALL RECIP ENGS
NO JET ENGINES

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-802-016
RUN 03
11 AUG 76
PAGE 24




| POINT | DB |
|---|---|
| A | 35 |
| B | 40 |
| C | 45 |
| D | 50 |
| E | 55 |
| F | 60 |
| G | 65 |
| H | 70 |
| I | 75 |
| J | 80 |
| K | 85 |
| L | 90 |
| M | 95 |
| N | 100 |

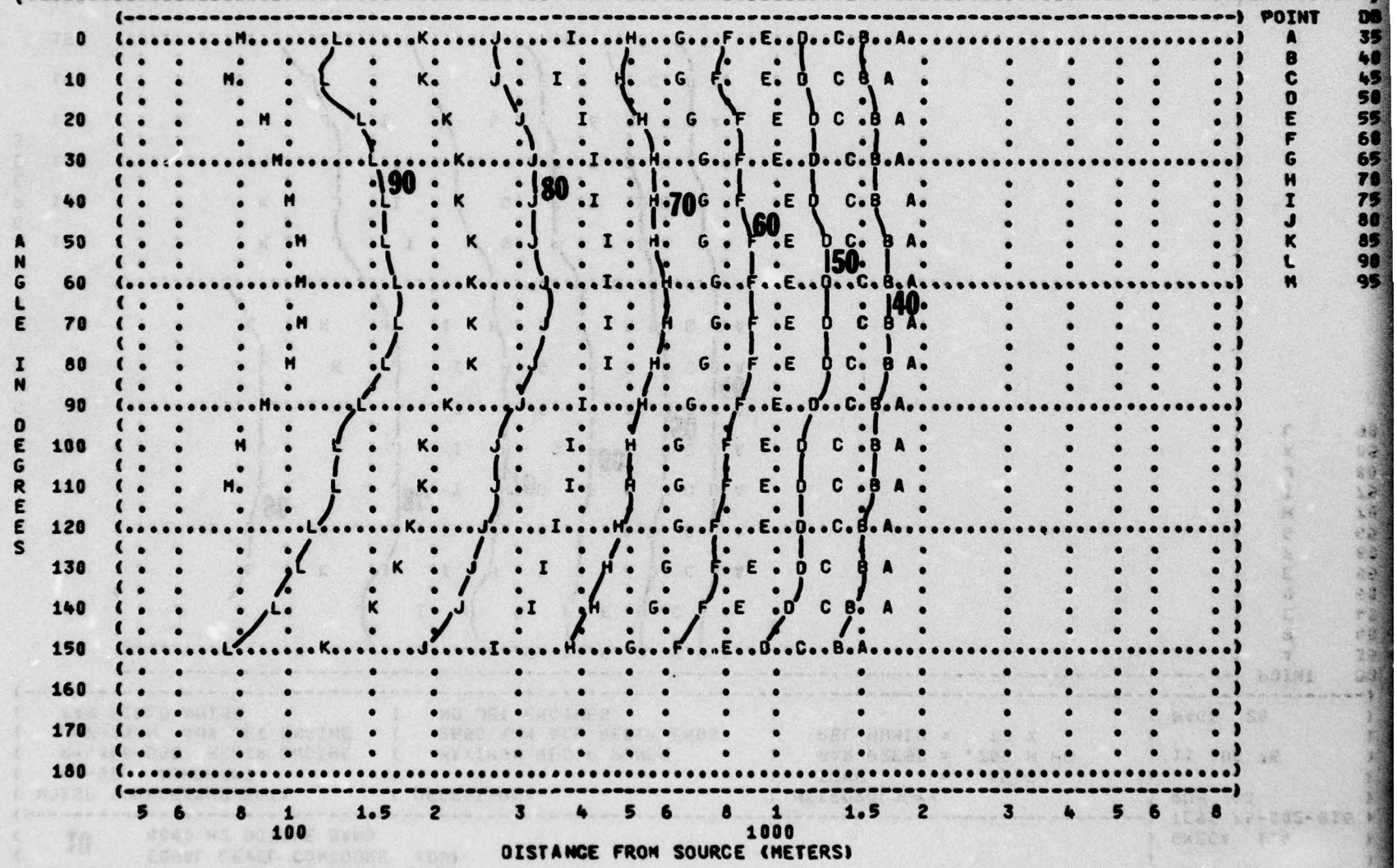
FIGURE 10: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 4000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM RECIP POWER
2650 RPM ALL RECIP ENGS
NO JET ENGINES

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-082-016
RUN 03
11 AUG 76
PAGE 25




| POINT | DB |
|---|---|
| A | 35 |
| B | 40 |
| C | 45 |
| D | 50 |
| E | 55 |
| F | 60 |
| G | 65 |
| H | 70 |
| I | 75 |
| J | 80 |
| K | 85 |
| L | 90 |
| M | 95 |

FIGURE: 10

SOUND PRESSURE LEVEL (SPL)
EQUAL LEVEL CONTOURS (DB)
8000 HZ OCTAVE BAND

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 03
11 AUG 76
PAGE 26

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM RECIP POWER
2650 RPM ALL RECIP ENGS
NO JET ENGINES

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

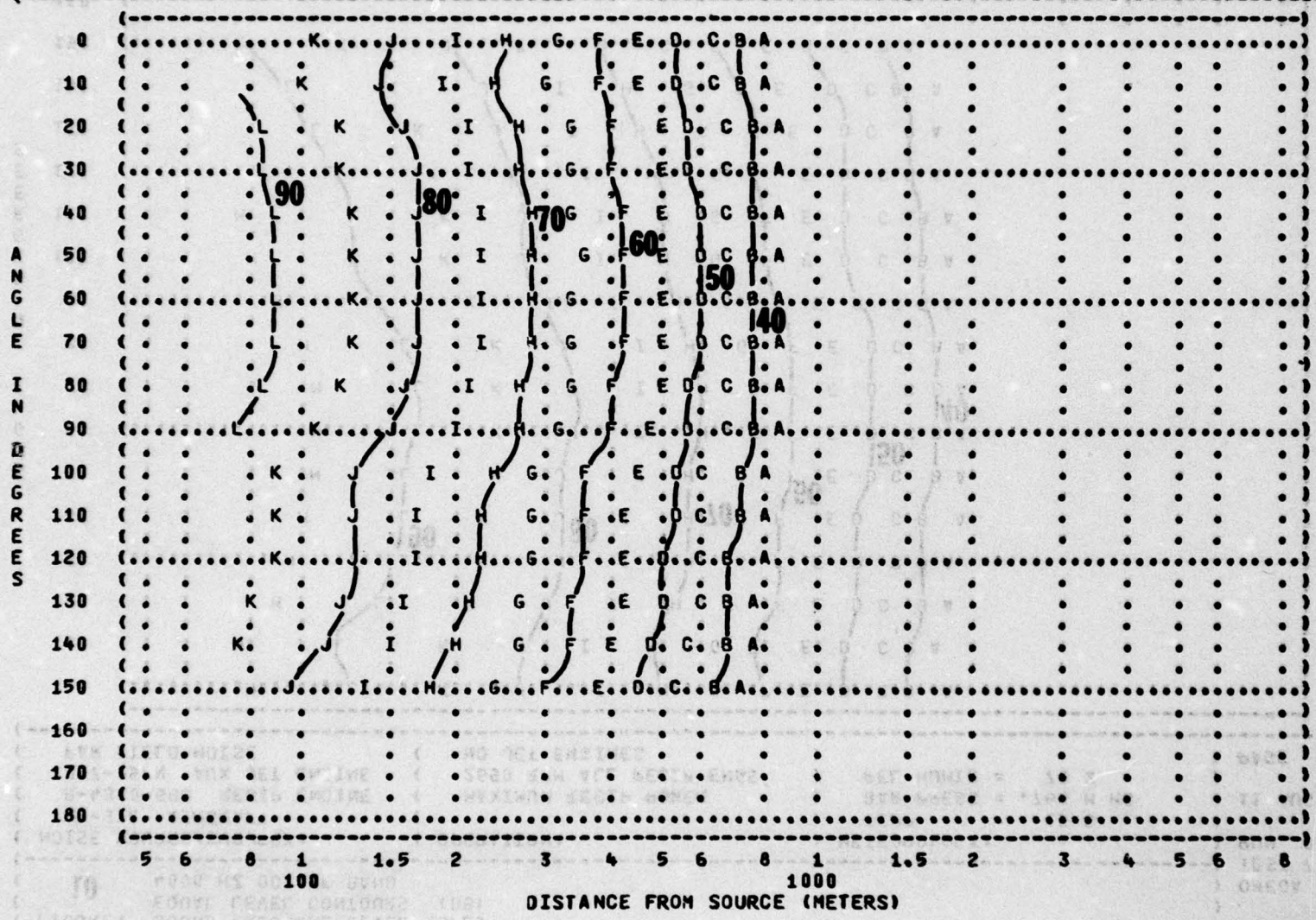


FIGURE: 10

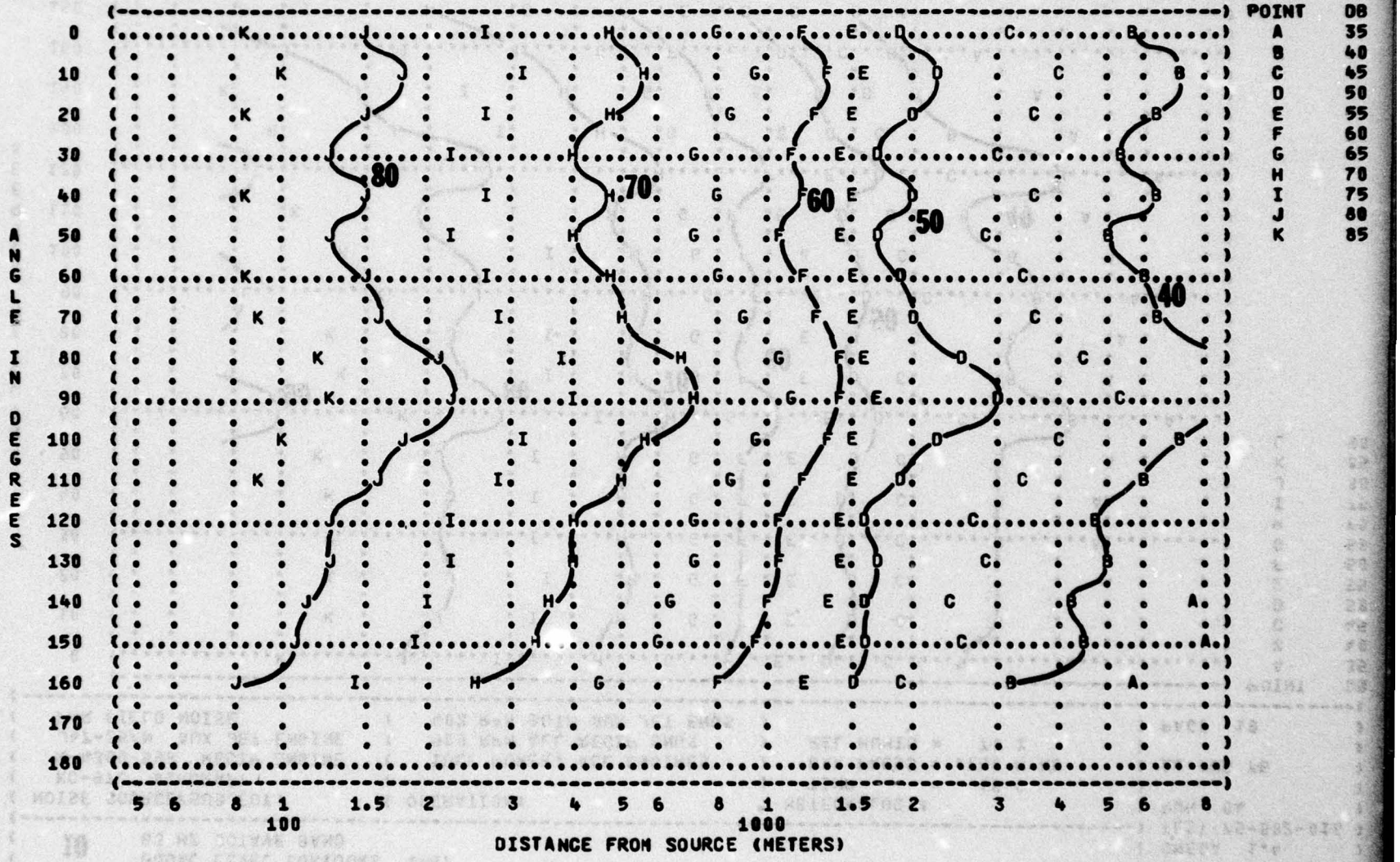
SOUND PRESSURE LEVEL (SPL)
EQUAL LEVEL CONTOURS (DB)
31.5 HZ OCTAVE BAND

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 04
11 AUG 76
PAGE 18

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER, ALL ENGINES
900 RPM ALL RECIP ENGS
40% RPM BOTH AUX JET ENGS

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %




| POINT | DB |
|---|---|
| A | 35 |
| B | 40 |
| C | 45 |
| D | 50 |
| E | 55 |
| F | 60 |
| G | 65 |
| H | 70 |
| I | 75 |
| J | 80 |
| K | 85 |

FIGURE: 10 SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 63 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-598 RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER, ALL ENGINES
900 RPM ALL RECIP ENGS
40% RPM BOTH AUX JET ENGS

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 04
11 AUG 76
PAGE 19

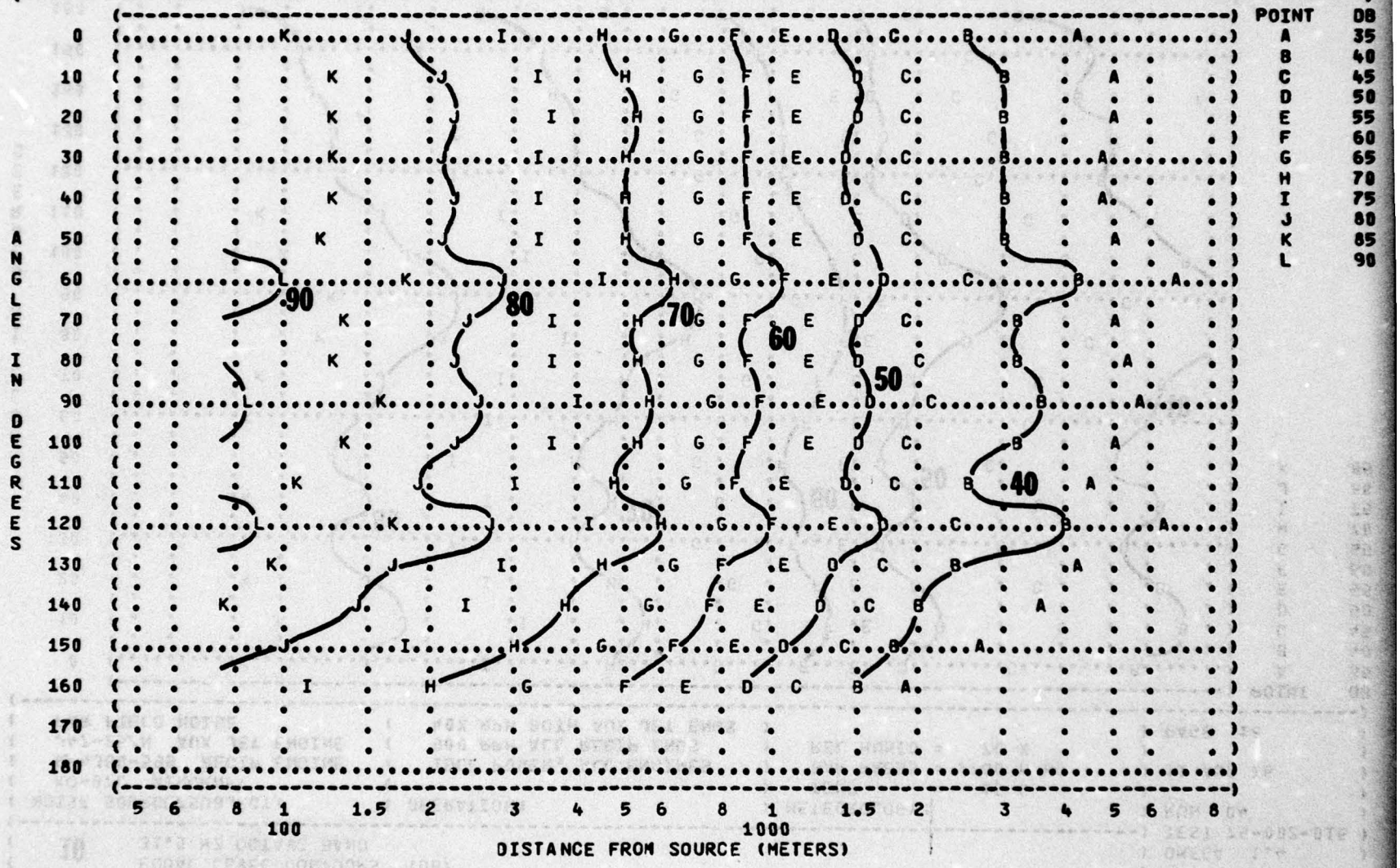


FIGURE 10 SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 125 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER, ALL ENGINES
900 RPM ALL RECIP ENGS
40% RPM BOTH AUX JET ENGS

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 04
11 AUG 76
PAGE 20

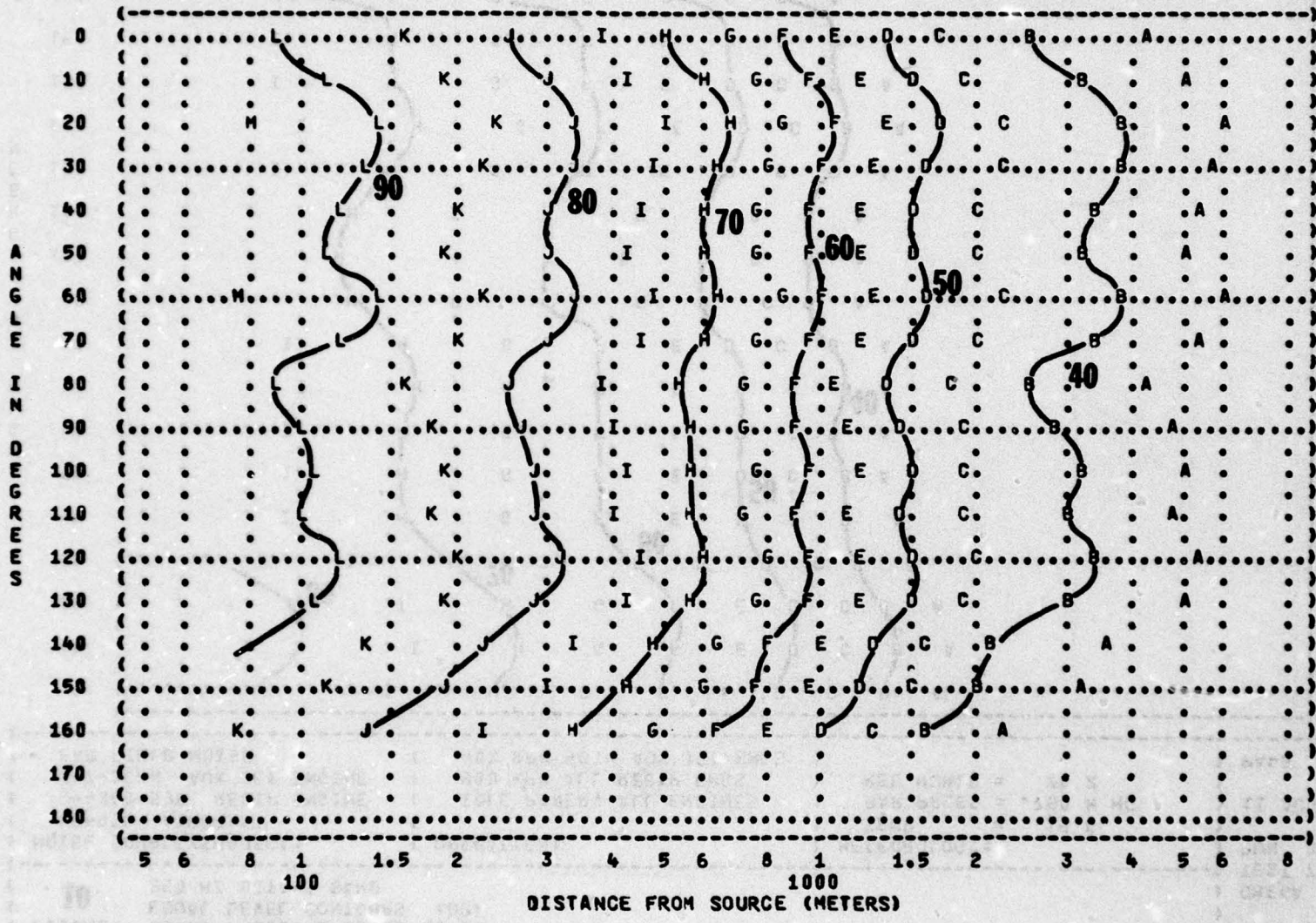


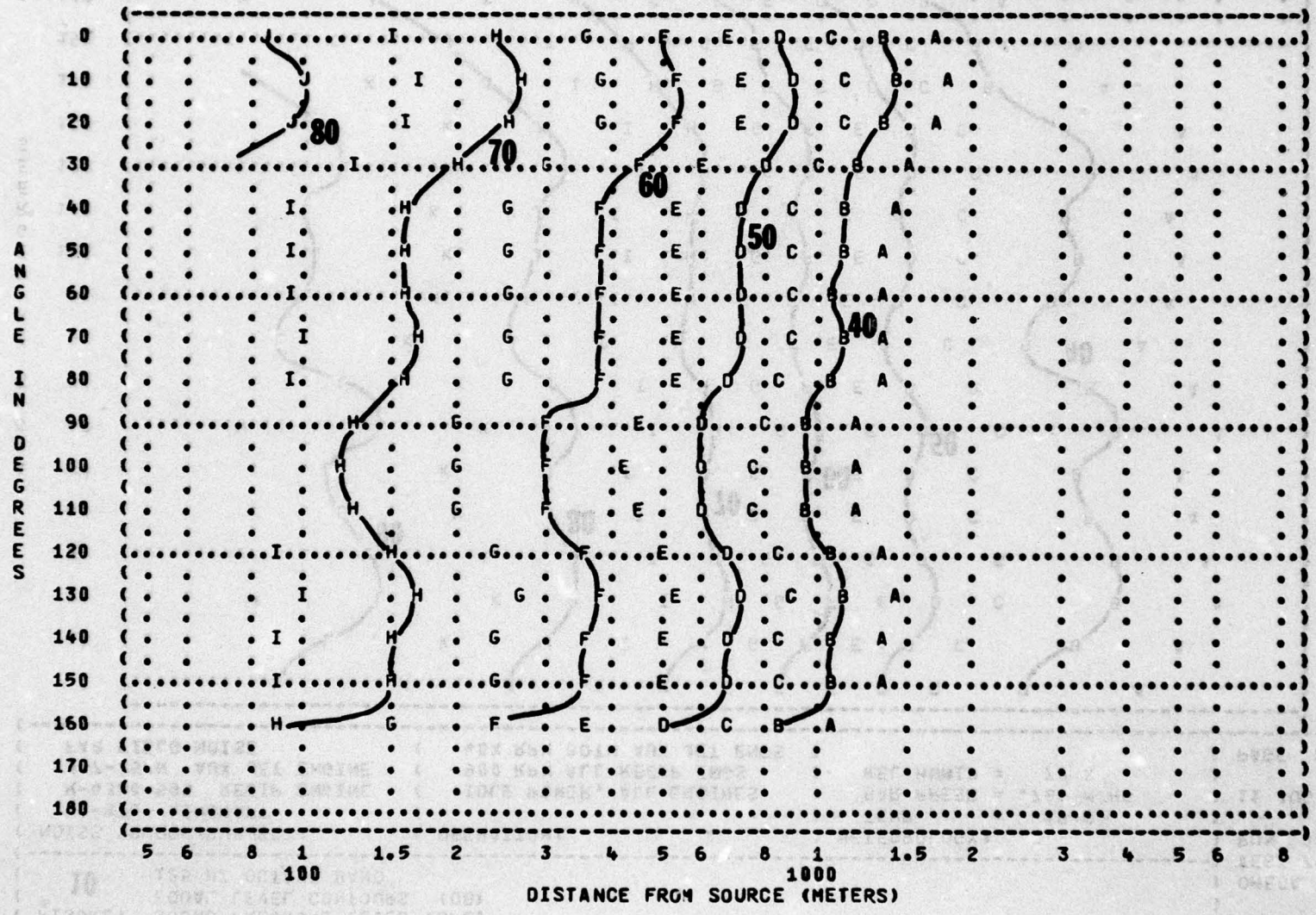
FIGURE: 10 SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 250 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER, ALL ENGINES
900 RPM ALL RECIP ENGS
40% RPM BOTH AUX JET ENGS

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-802-016
RUN 04
11 AUG 76
PAGE 21




| POINT | DB |
|---|---|
| A | 35 |
| B | 40 |
| C | 45 |
| D | 50 |
| E | 55 |
| F | 60 |
| G | 65 |
| H | 70 |
| I | 75 |
| J | 80 |

FIGURE: 10

SOUND PRESSURE LEVEL (SPL)
EQUAL LEVEL CONTOURS (DB)
500 HZ OCTAVE BAND

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 04
11 AUG 76
PAGE 22

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER, ALL ENGINES
900 RPM ALL RECIP ENGS
40% RPM BOTH AUX JET ENGS

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

| POINT | DB |
|---|---|
| A | 35 |
| B | 40 |
| C | 45 |
| D | 50 |
| E | 55 |
| F | 60 |
| G | 65 |
| H | 70 |
| I | 75 |
| J | 80 |

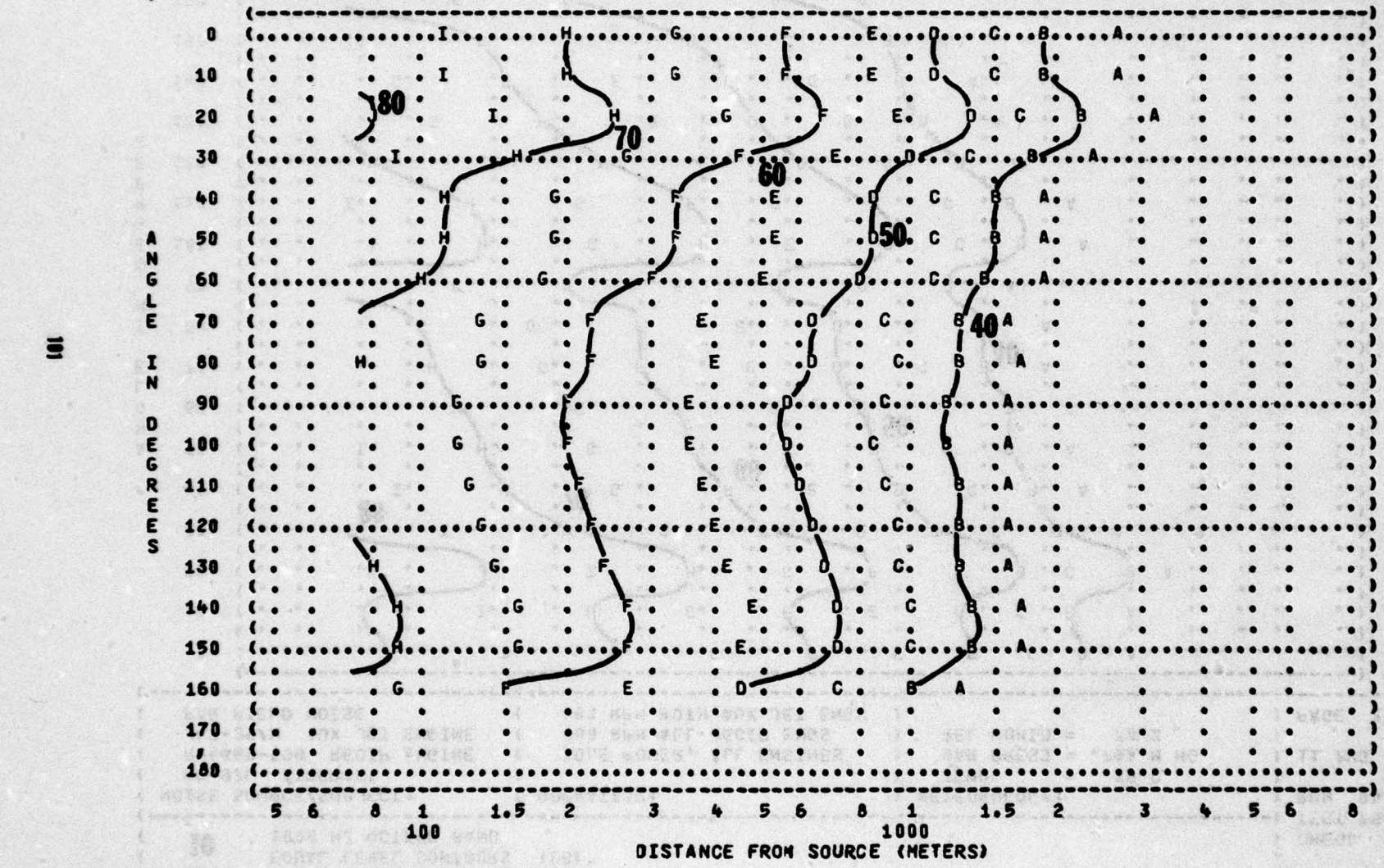


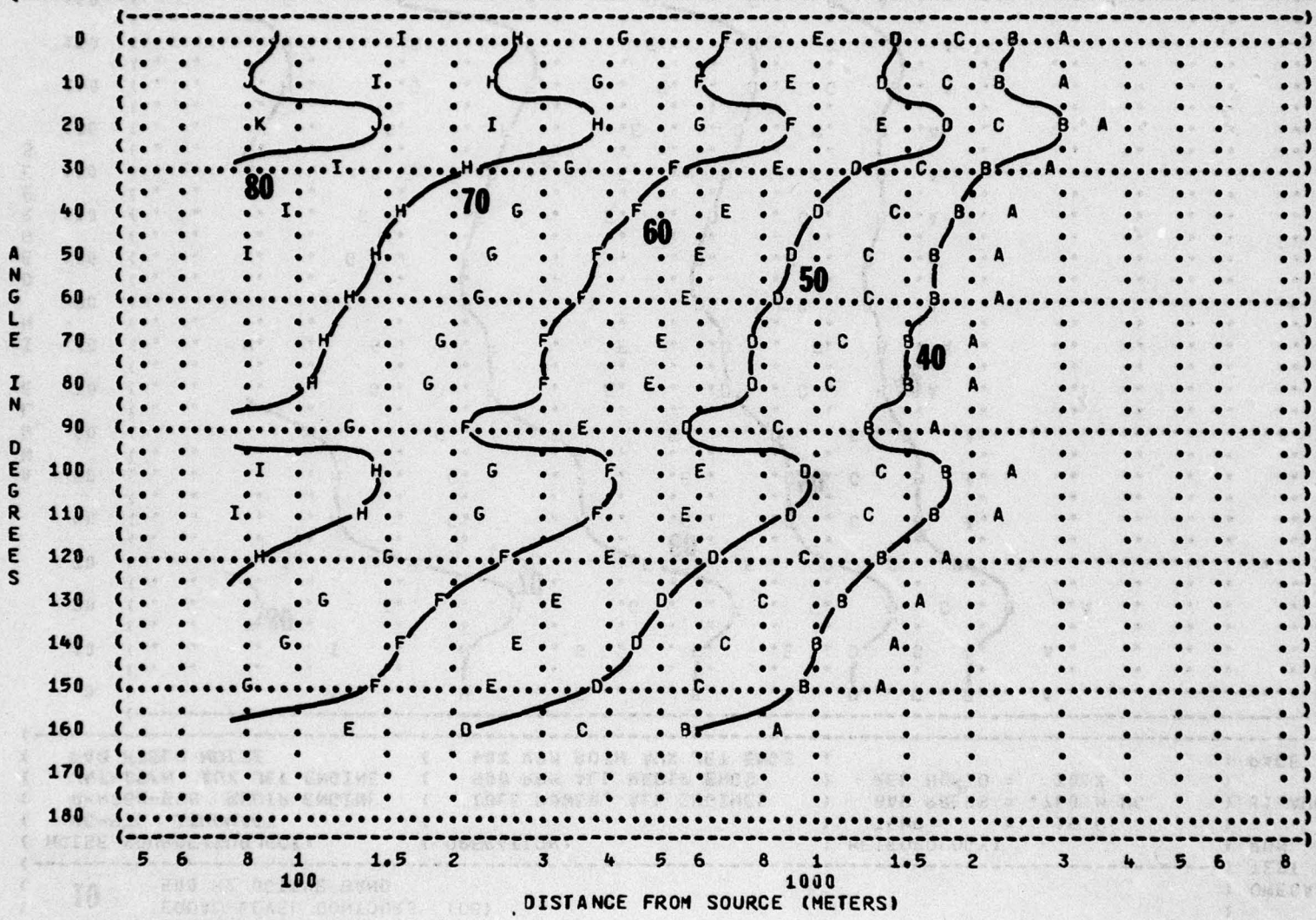
FIGURE: 10 SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 1000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-598 RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER, ALL ENGINES
900 RPM ALL RECIP ENGS
40% RPM BOTH AUX JET ENGS

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 04
11 AUG 76
PAGE 23




| POINT | DB |
|---|---|
| A | 35 |
| B | 40 |
| C | 45 |
| D | 50 |
| E | 55 |
| F | 60 |
| G | 65 |
| H | 70 |
| I | 75 |
| J | 80 |
| K | 85 |

FIGURE 10: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 2000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER, ALL ENGINES
900 RPM ALL RECIP ENGS
40% RPM BOTH AUX JET ENGS

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 84
11 AUG 76
PAGE 24

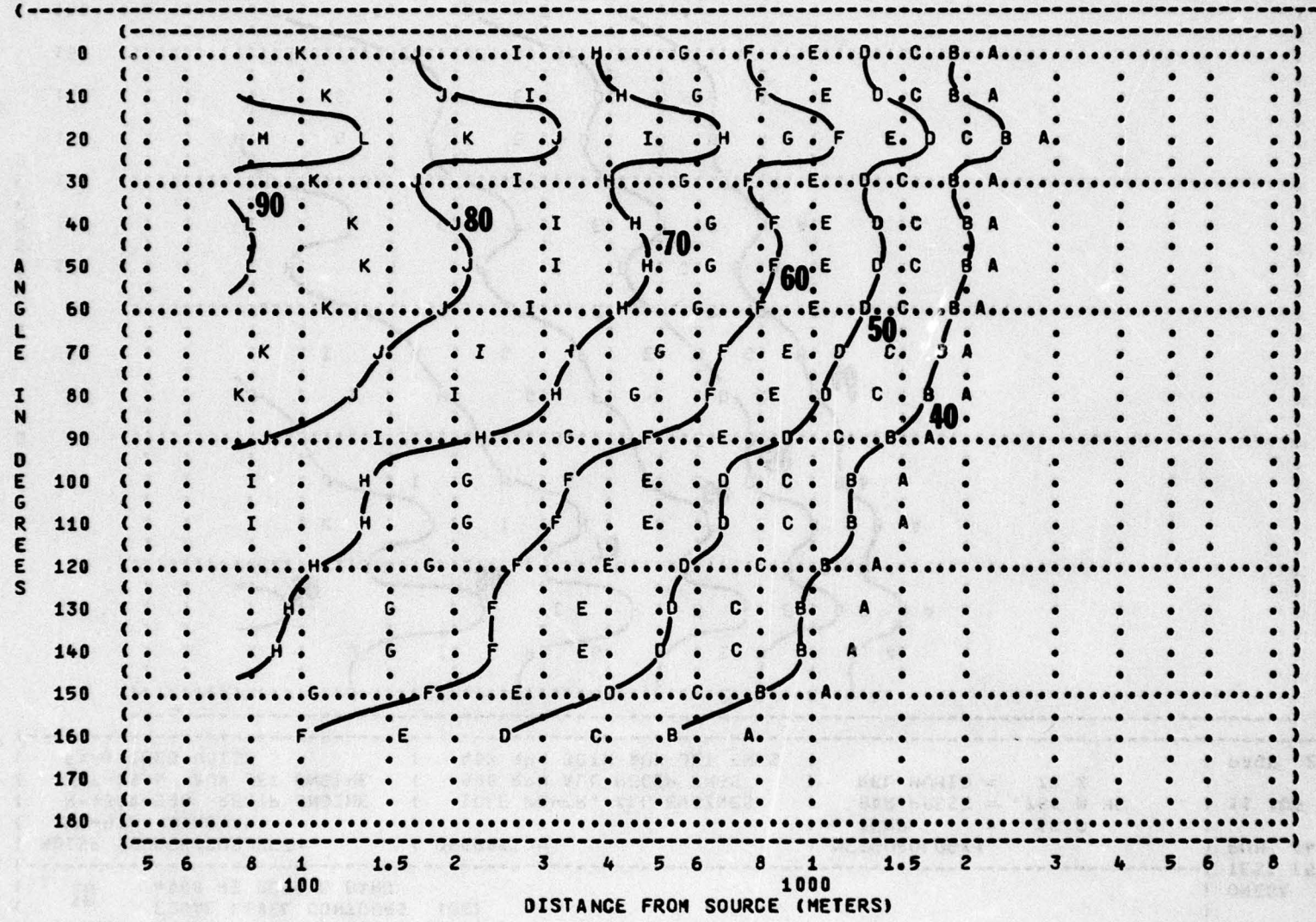


FIGURE 10: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 4000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER, ALL ENGINES
900 RPM ALL RECIP ENGS
40% RPM BOTH AUX JET ENGS

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-802-016
RUN 04
11 AUG 76
PAGE 25

| POINT | DB |
|---|---|
| A | 35 |
| B | 40 |
| C | 45 |
| D | 50 |
| E | 55 |
| F | 60 |
| G | 65 |
| H | 70 |
| I | 75 |
| J | 80 |
| K | 85 |
| L | 90 |

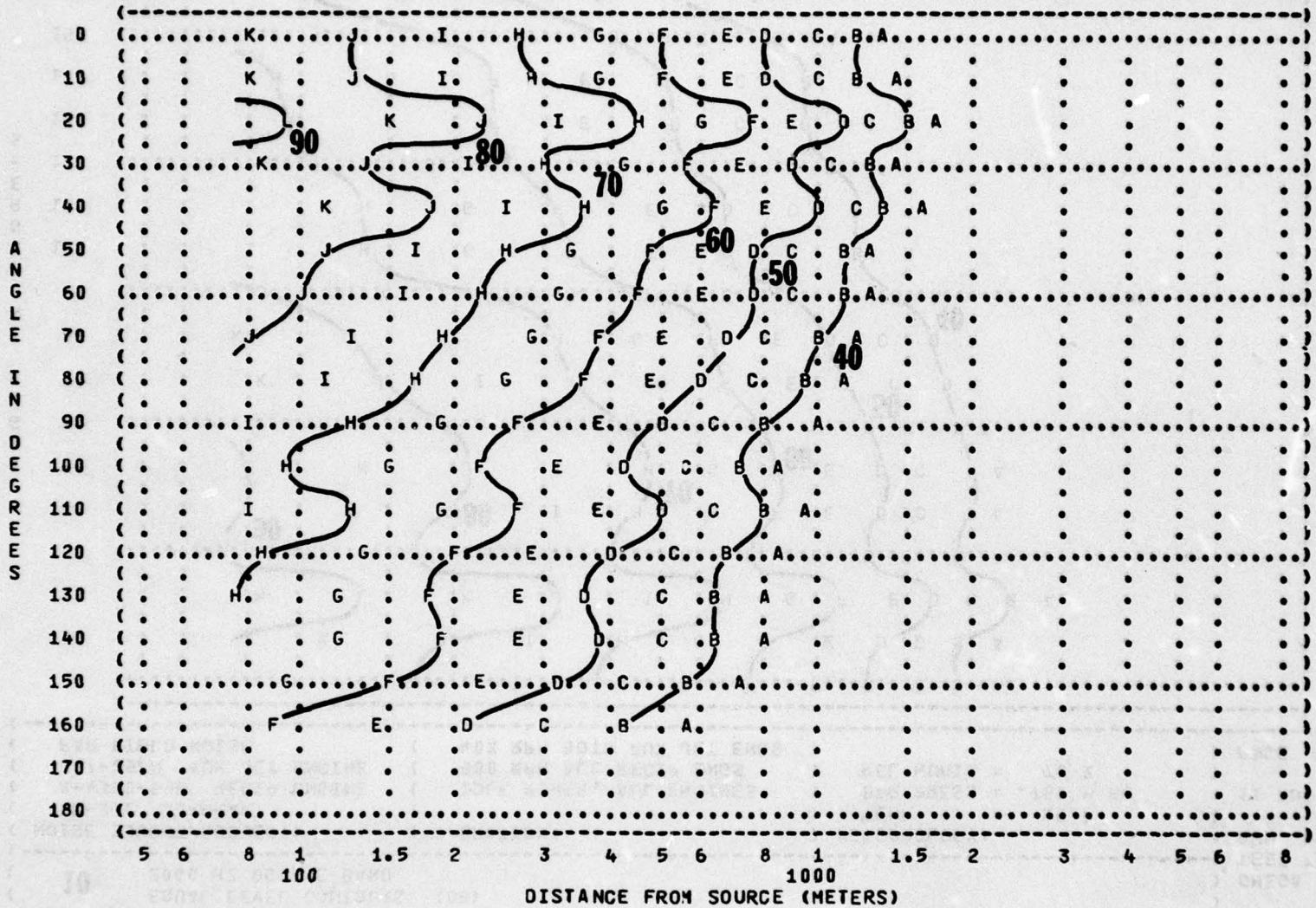


FIGURE: 10

SOUND PRESSURE LEVEL (SPL)
EQUAL LEVEL CONTOURS (DB)
8000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
IDLE POWER, ALL ENGINES
900 RPM ALL RECIP ENGS
40% RPM BOTH AUX JET ENGS

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 04
11 AUG 76
PAGE 26

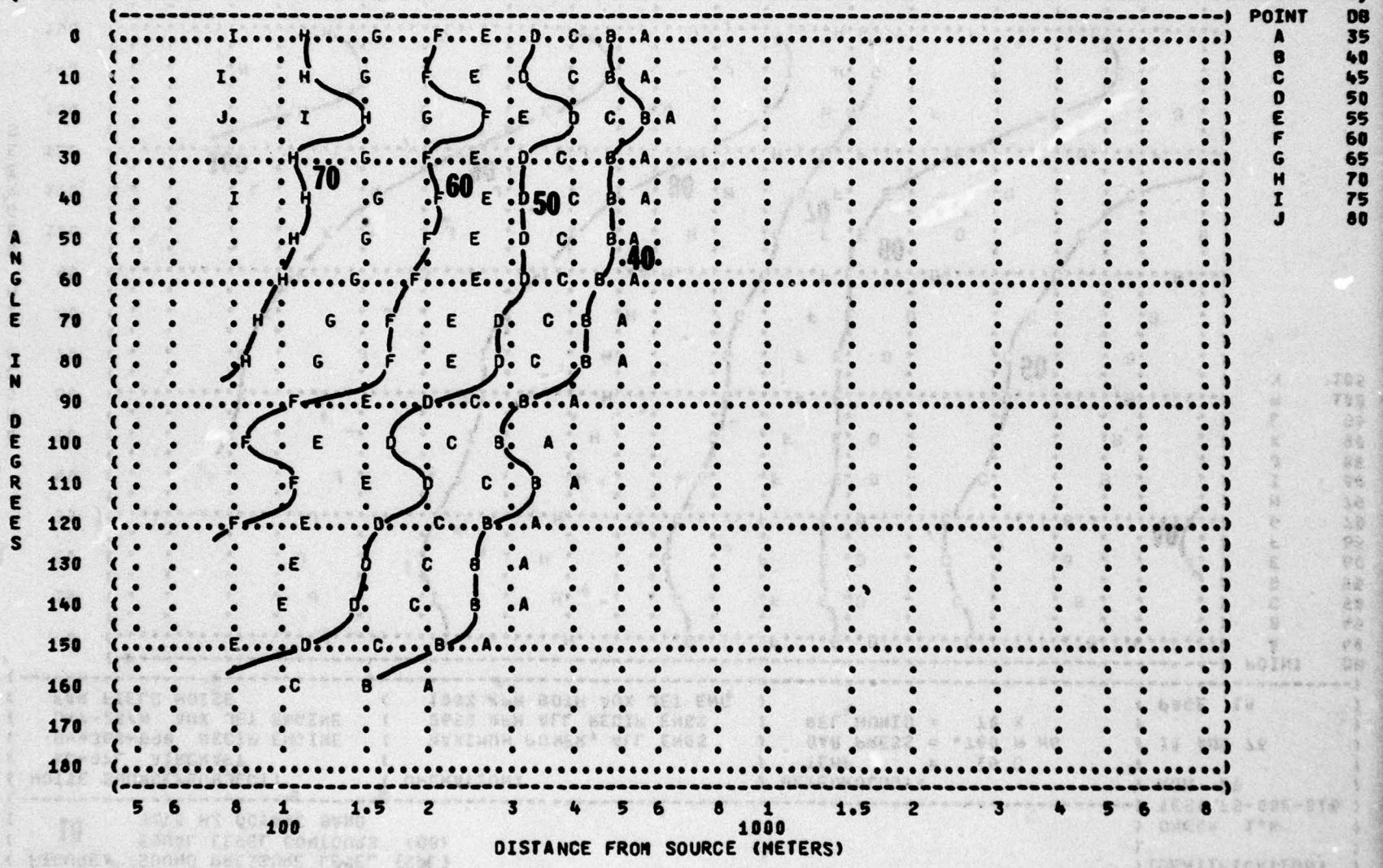


FIGURE 10: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 31.5 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER, ALL ENGS
2650 RPM ALL RECIP ENGS
100% RPM BOTH AUX JET ENG

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-082-016
RUN 05
11 AUG 76
PAGE 18

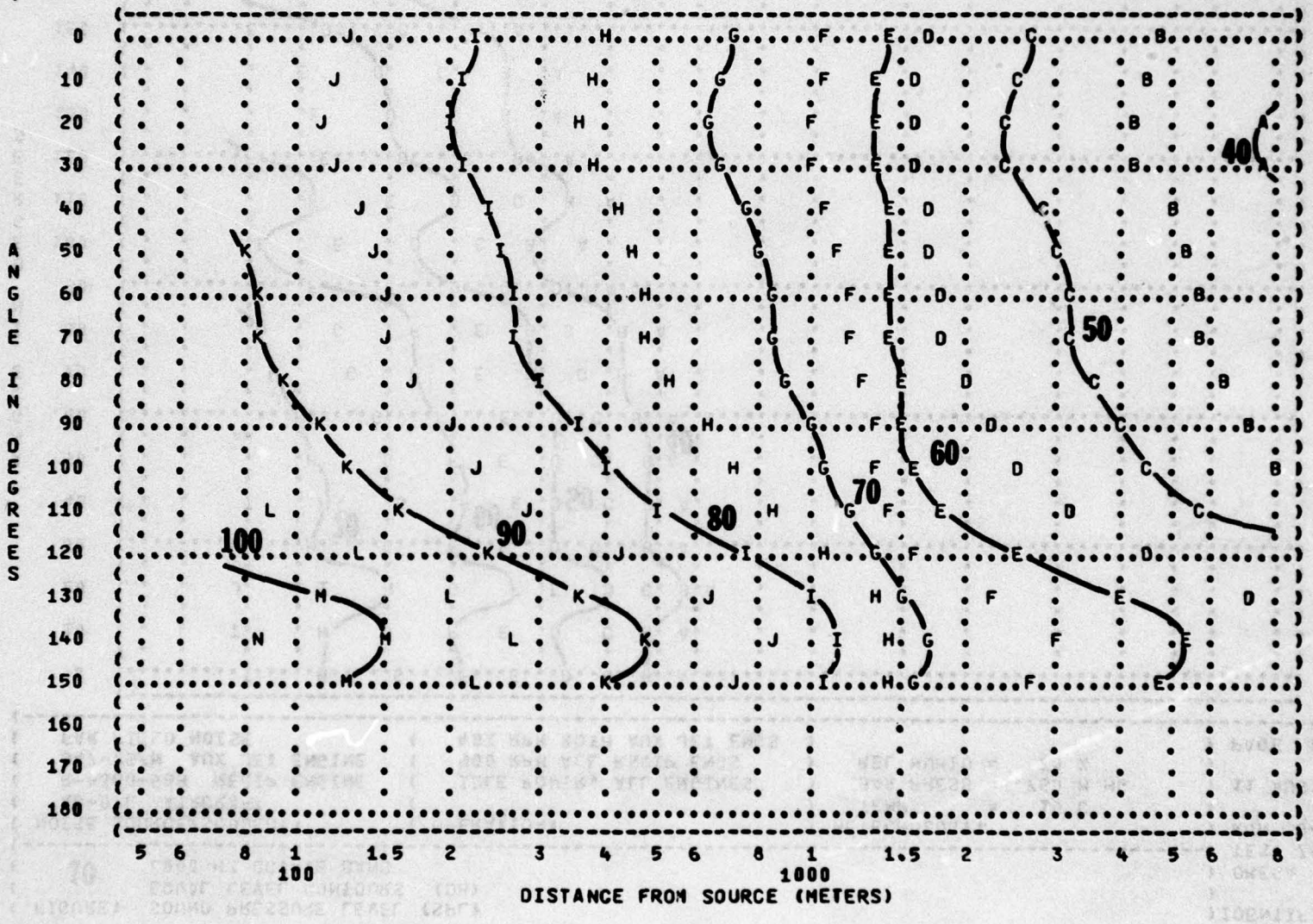


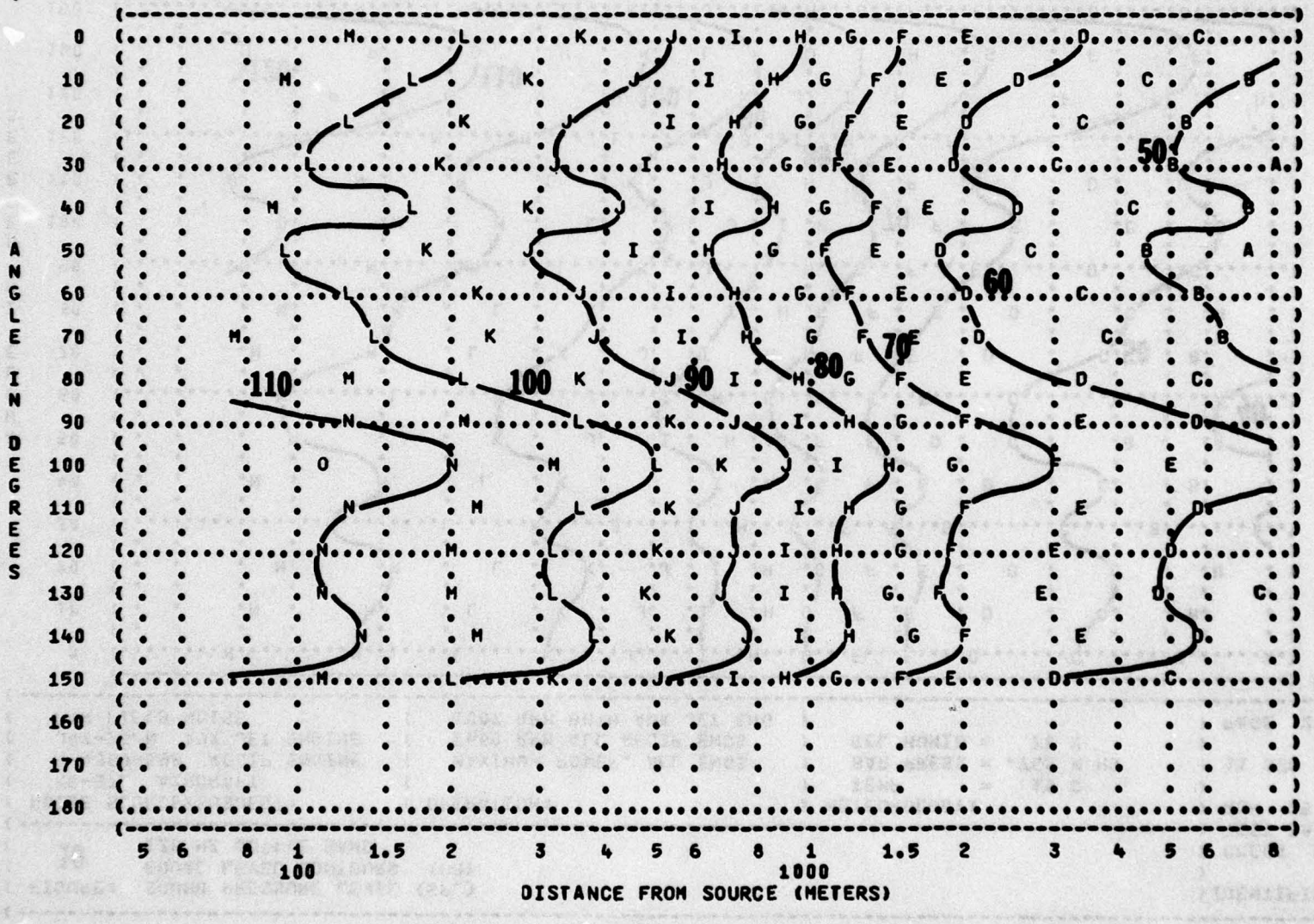
FIGURE 10: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 63 HZ OCTAVE BAND

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 05
11 AUG 76
PAGE 19

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-598 RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER, ALL ENGS
2650 RPM ALL RECIP ENGS
100% RPM BOTH AUX JET ENG

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %




| POINT | DB |
|---|---|
| A | 45 |
| B | 50 |
| C | 55 |
| D | 60 |
| E | 65 |
| F | 70 |
| G | 75 |
| H | 80 |
| I | 85 |
| J | 90 |
| K | 95 |
| L | 100 |
| M | 105 |
| N | 110 |
| O | 115 |

FIGURE: 10

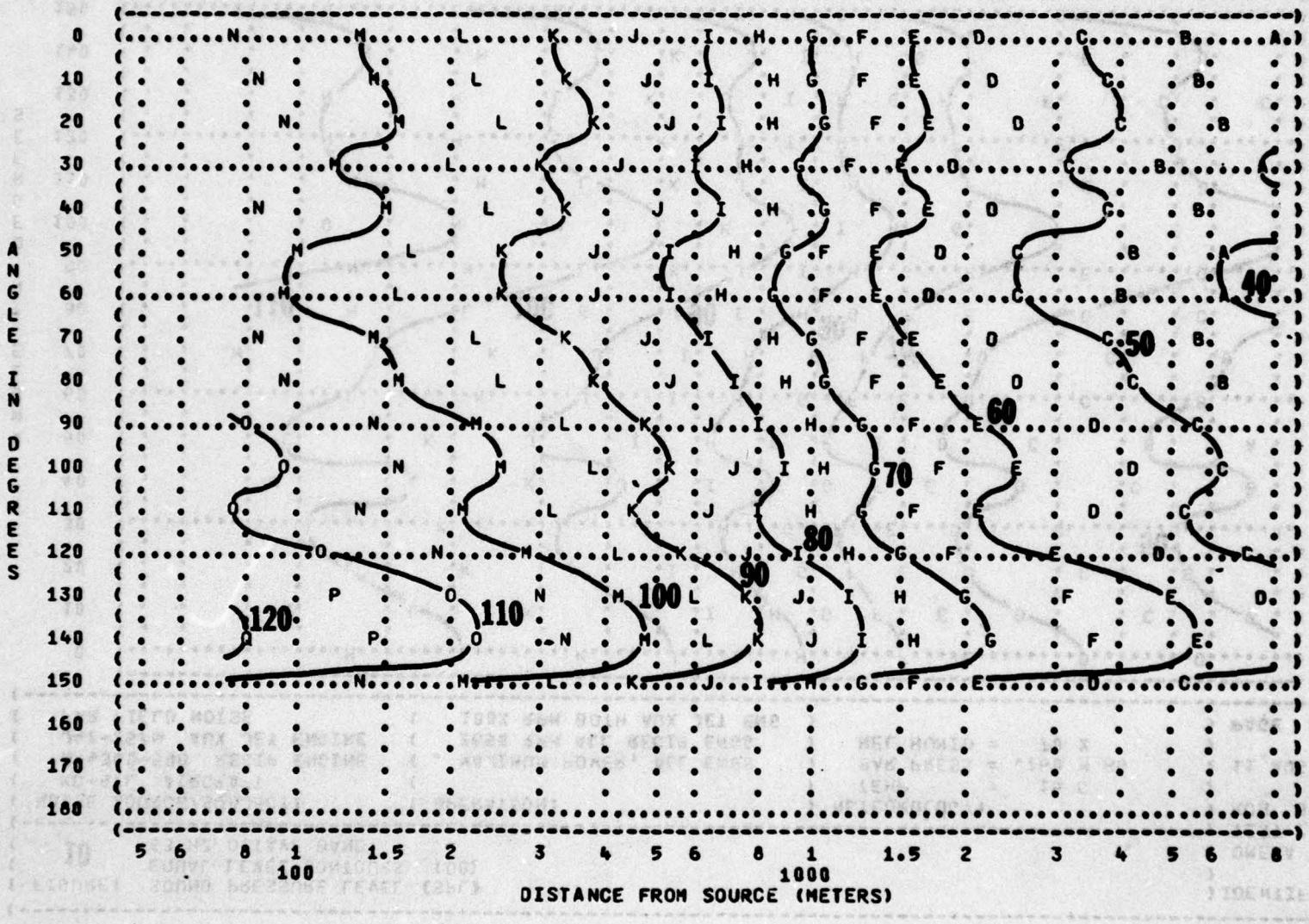
SOUND PRESSURE LEVEL (SPL)
EQUAL LEVEL CONTOURS (DB)
125 HZ OCTAVE BAND

IDENTIFICATION:
OMEGA 1.4
TEST 75-882-016
RUN 05
11 AUG 76
PAGE 28

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-598 RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER, ALL ENGS
2650 RPM ALL RECIP ENGS
100% RPM BOTH AUX JET ENG

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %




POINT DB

| POINT | DB |
|---|---|
| A | 40 |
| B | 45 |
| C | 50 |
| D | 55 |
| E | 60 |
| F | 65 |
| G | 70 |
| H | 75 |
| I | 80 |
| J | 85 |
| K | 90 |
| L | 95 |
| M | 100 |
| N | 105 |
| O | 110 |
| P | 115 |
| Q | 120 |

FIGURE 10: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 250 HZ OCTAVE BAND

IDENTIFICATION: OMEGA 1.4 TEST 75-002-016 RUN 05 11 AUG 76 PAGE 21

NOISE SOURCE/SUBJECT: KC-97L AIRCRAFT; R-4360-59B RECIP ENGINE; J47-25/N AUX JET ENGINE; FAR FIELD NOISE

OPERATION: MAXIMUM POWER, ALL ENGS; 2650 RPM ALL RECIP ENGS; 100% RPM BOTH AUX JET ENG

METEOROLOGY: TEMP = 15 C; BAR PRESS = .760 M HG; REL HUMID = 70 %

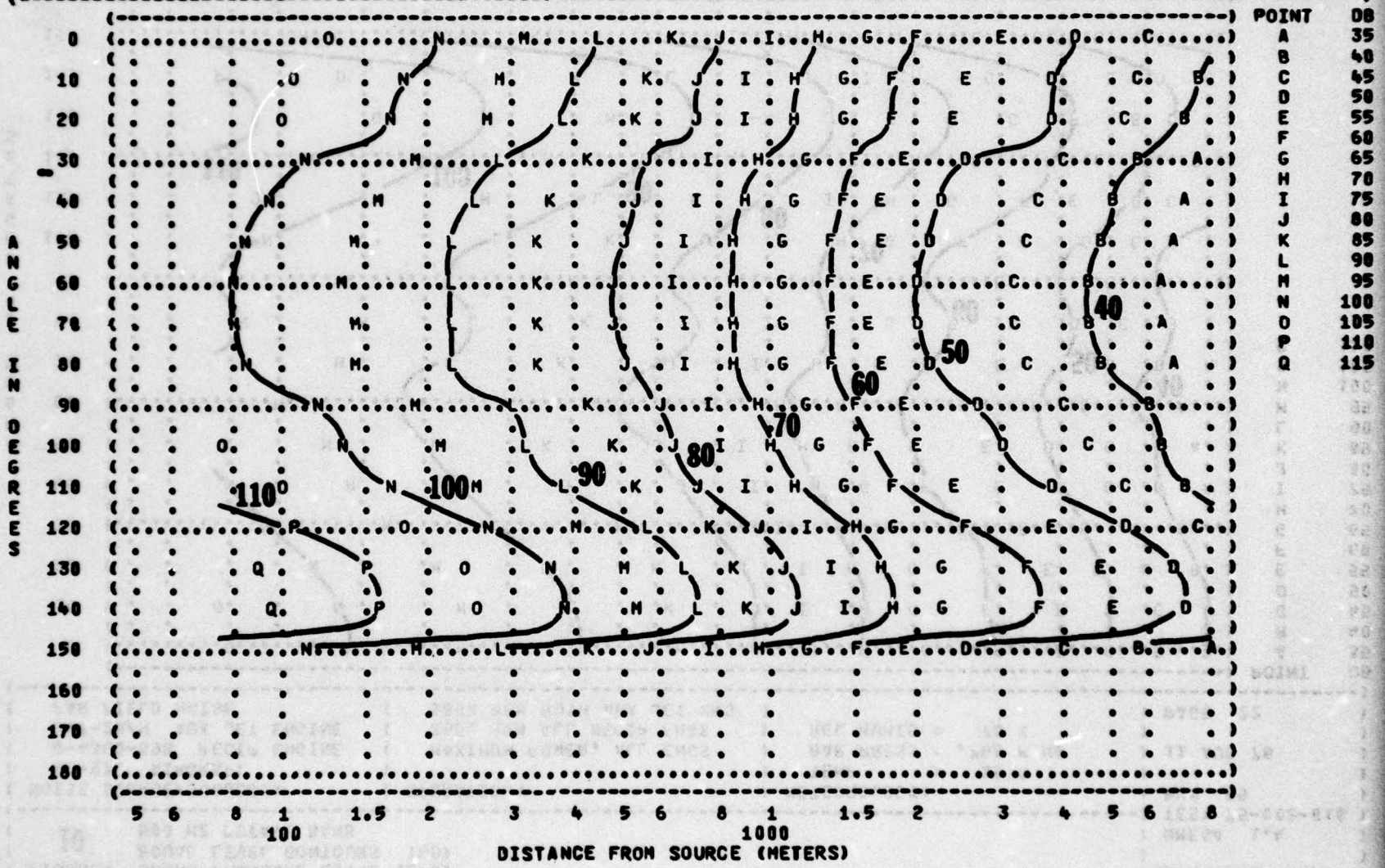


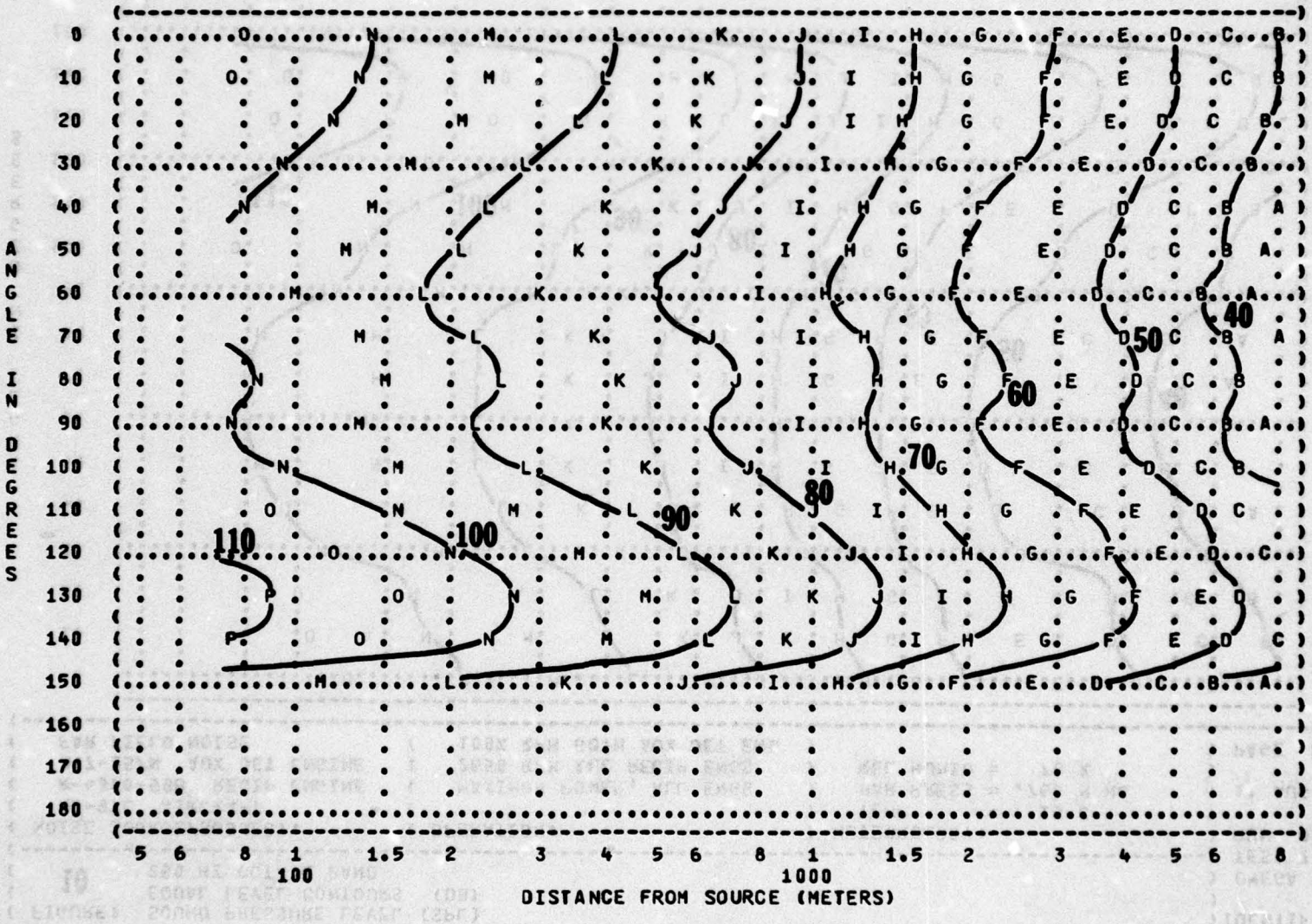
FIGURE 10: SOUND PRESSURE LEVEL (SPL)
EQUAL LEVEL CONTOURS (DB)
500 HZ OCTAVE BAND

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 05
11 AUG 76
PAGE 22

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER, ALL ENGS
2650 RPM ALL RECIP ENGS
100% RPM BOTH AUX JET ENG

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %




| POINT | DB |
|---|---|
| A | 35 |
| B | 40 |
| C | 45 |
| D | 50 |
| E | 55 |
| F | 60 |
| G | 65 |
| H | 70 |
| I | 75 |
| J | 80 |
| K | 85 |
| L | 90 |
| M | 95 |
| N | 100 |
| O | 105 |
| P | 110 |

FIGURE: 10

SOUND PRESSURE LEVEL (SPL)
EQUAL LEVEL CONTOURS (DB)
1000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER, ALL ENGS
2650 RPM ALL RECIP ENGS
100% RPM BOTH AUX JET ENG

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 05
11 AUG 76
PAGE 23

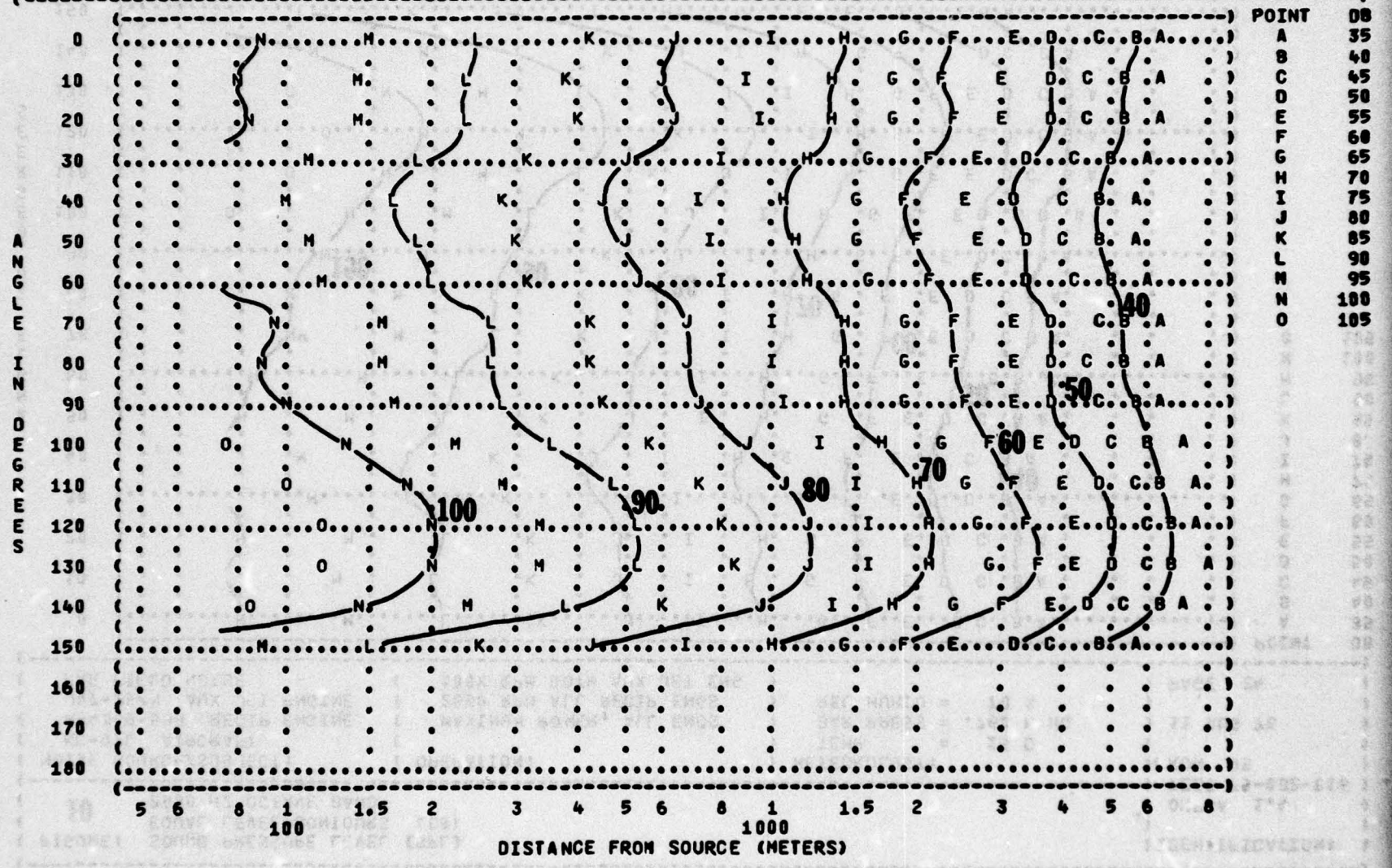


FIGURE: 10

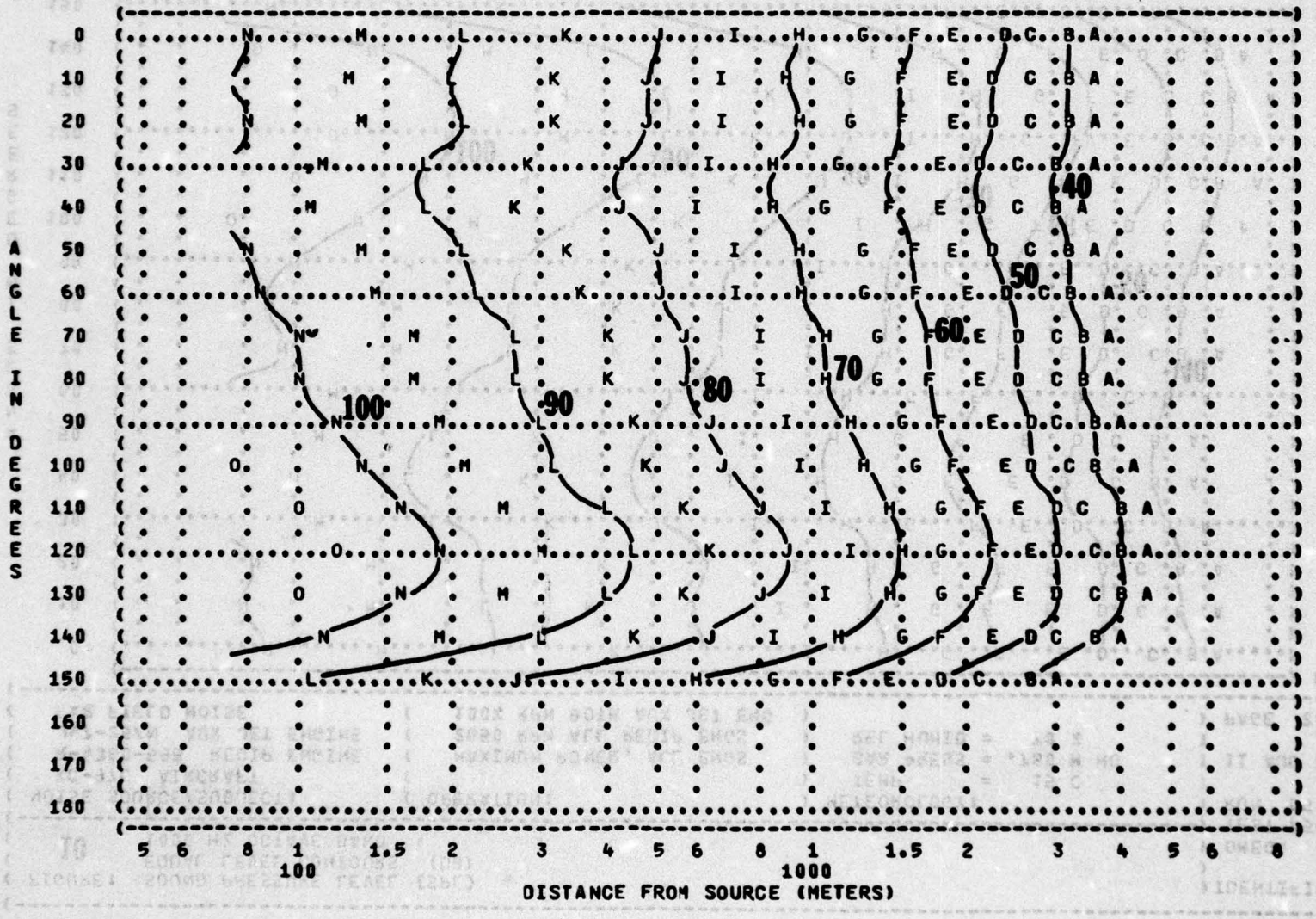
SOUND PRESSURE LEVEL (SPL)
EQUAL LEVEL CONTOURS (DB)
2000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER, ALL ENGS
2650 RPM ALL RECIP ENGS
100% RPM BOTH AUX JET ENG

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-082-016
RUN 05
11 AUG 76
PAGE 24




| POINT | DB |
|---|---|
| A | 35 |
| B | 40 |
| C | 45 |
| D | 50 |
| E | 55 |
| F | 60 |
| G | 65 |
| H | 7[illegible] |
| I | 75 |
| J | 8[illegible] |
| K | 85 |
| L | 90 |
| M | 95 |
| N | 100 |
| O | 105 |

FIGURE: 10

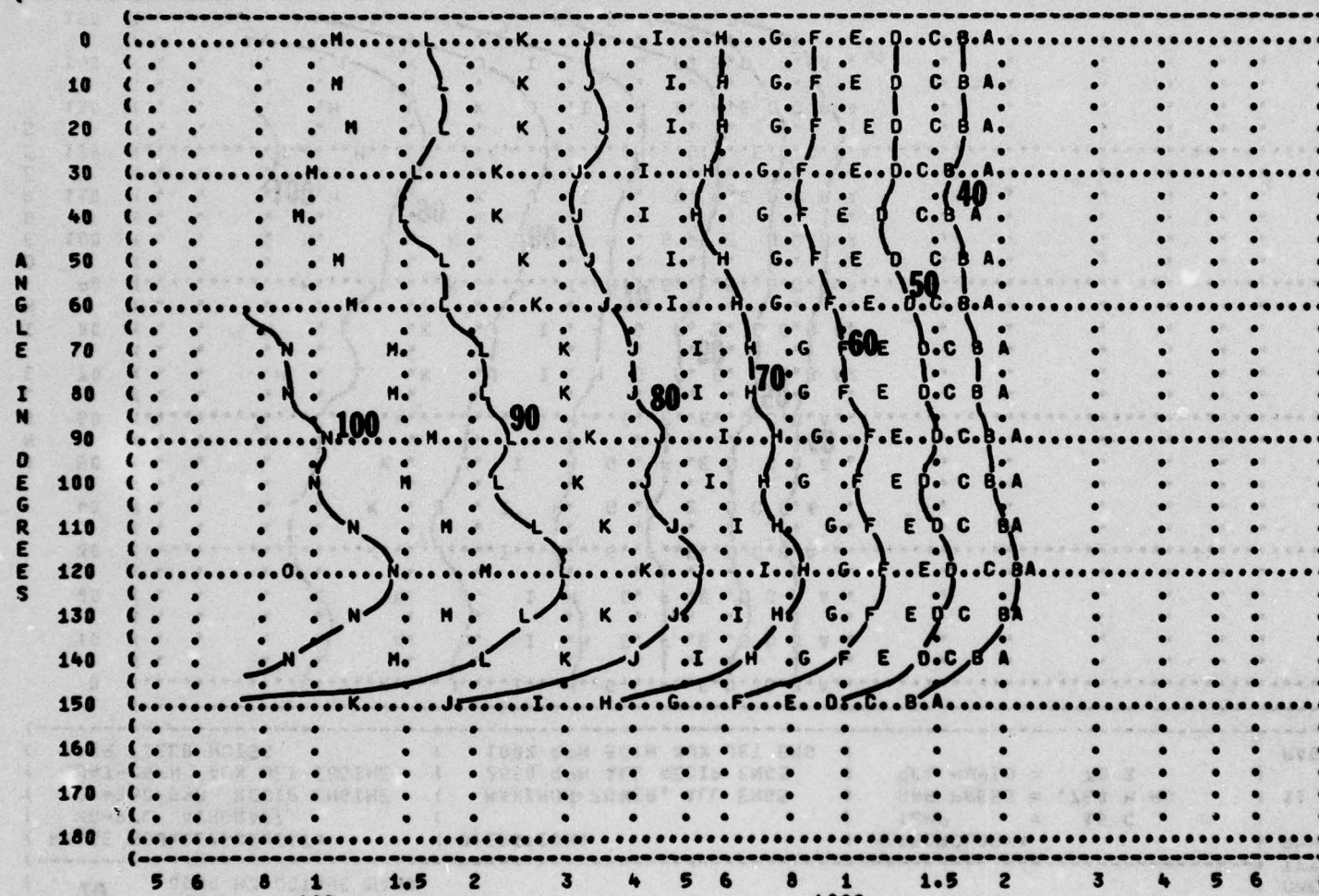
SOUND PRESSURE LEVEL (SPL)
EQUAL LEVEL CONTOURS (DB)
4000 HZ OCTAVE BAND

NOISE SOURCE/SUBJECT:
KC-97L AIRCRAFT
R-4360-59B RECIP ENGINE
J47-25/N AUX JET ENGINE
FAR FIELD NOISE

OPERATION:
MAXIMUM POWER, ALL ENGS
2650 RPM ALL RECIP ENGS
100% RPM BOTH AUX JET ENG

METEOROLOGY:
TEMP = 15 C
BAR PRESS = .760 M HG
REL HUMID = 70 %

IDENTIFICATION:
OMEGA 1.4
TEST 75-002-016
RUN 05
11 AUG 76
PAGE 25




| POINT | DB |
|---|---|
| A | 35 |
| B | 40 |
| C | 45 |
| D | 50 |
| E | 55 |
| F | 60 |
| G | 65 |
| H | 70 |
| I | 75 |
| J | 80 |
| K | 85 |
| L | 90 |
| M | 95 |
| N | 100 |
| O | 105 |

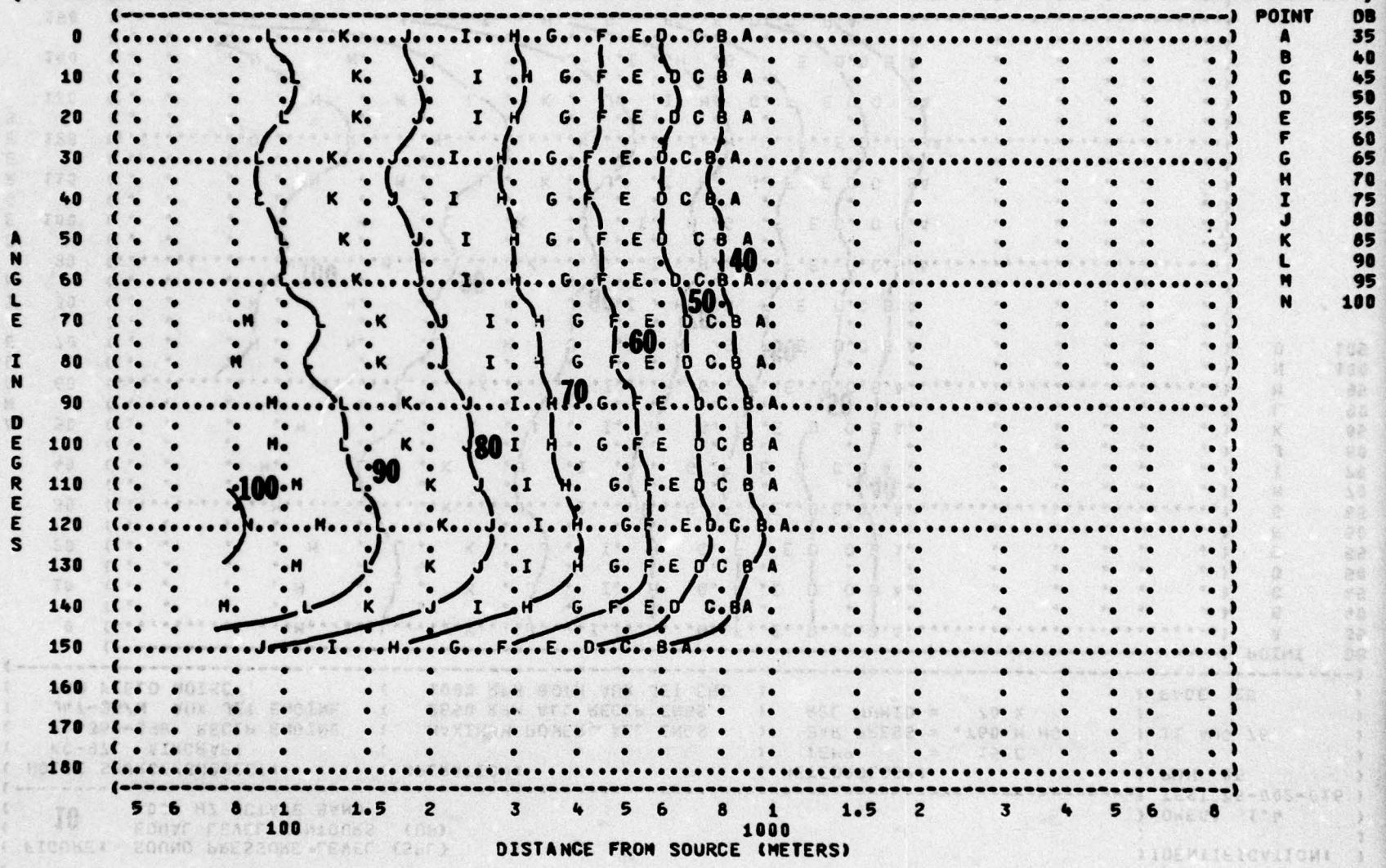
FIGURE 10: SOUND PRESSURE LEVEL (SPL) EQUAL LEVEL CONTOURS (DB) 8000 HZ OCTAVE BAND

IDENTIFICATION: OMEGA 1.4 TEST 75-002-016 RUN 05 11 AUG 76 PAGE 26

NOISE SOURCE/SUBJECT: KC-97L AIRCRAFT; R-4360-59B RECIP ENGINE; J47-25/N AUX JET ENGINE; FAR FIELD NOISE

OPERATION: MAXIMUM POWER, ALL ENGS; 2650 RPM ALL RECIP ENGS; 100% RPM BOTH AUX JET ENG

METEOROLOGY: TEMP = 15 C; BAR PRESS = .760 M HG; REL HUMID = 70 %




| POINT | DB |
|---|---|
| A | 35 |
| B | 40 |
| C | 45 |
| D | 50 |
| E | 55 |
| F | 60 |
| G | 65 |
| H | 70 |
| I | 75 |
| J | 80 |
| K | 85 |
| L | 90 |
| M | 95 |
| N | 100 |



*U.S.Government Printing Office: 1977 — 757-080/236